

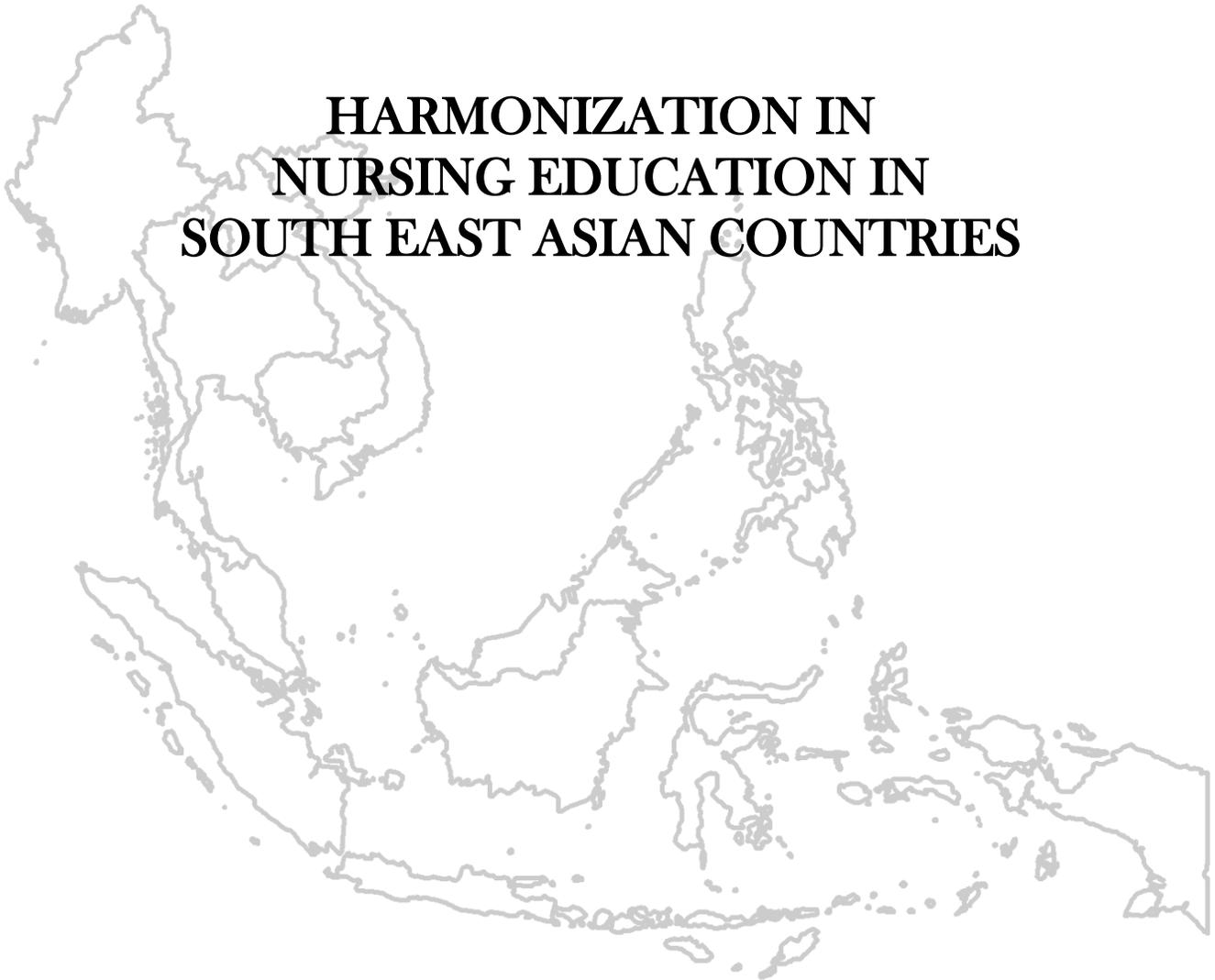


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SEAMEO College Module 2: High Officials Country Case Study (HOCCS)

HARMONIZATION IN NURSING EDUCATION IN SOUTH EAST ASIAN COUNTRIES



2016

**SEAMEO College Module 2:
High Officials Country Case Study
(HOCCS)**

(R-CDTA 8389: Support for a Regional Platform on Innovations in Education and Human Resource Development towards an Integrated ASEAN Community)

**HARMONIZATION IN
NURSING EDUCATION IN
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ACKNOWLEDGEMENTS

SEAMEO TROPED Network would like to thank the following who made the conduct of this case study possible:

- the Asian Development Bank through its R-CDTA 8389: Support for a Regional Platform on Innovation in Education and Human Resource Development towards an Integrated ASEAN Community;
- the SEAMEO Secretariat led by Dr. Gatot Hari Priowirjanto;
- the Project Management Committee;
- the Project Management Teams;
- the Key Informants and Survey respondents;
- the Consultants- Dr. Jose Y. Cueto and Dr. Teresita I. Barcelo; and
- to all those who in one way or another supported and facilitated the implementation of this endeavor.

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I. Background and Rationale

In Southeast Asia, governments, private sector and all stakeholders have been working together towards the full realization of the Association of South East Asian Nations (ASEAN) Community 2015 which is envisioned to be “politically cohesive, economically integrated, culturally harmonious and socially responsible.”¹ Various efforts of governments in support of integration in ASEAN have focused on various aspects such as comprehensive security, common identity, free-trade areas, education harmonization, people mobility, and others.

South East Asian Ministers of Education Organization (SEAMEO) as the leading organization in education, science and culture cooperation in the region has initiated several projects in support of ASEAN integration and the ASEAN Community 2015. The SEAMEO College is one of the SEAMEO initiatives under the 2011-2020 SEAMEO Strategic Plan that aims to strengthen SEAMEO’s capacity to promote education and social development in Southeast Asia and support regional platforms on innovation in education and human resource development towards an integrated ASEAN Community. SEAMEO College consists of a series of forums targeting 4 groups (4 Modules): education ministers, high officials, education leaders, and youth leaders. Module 2 or the High Officials Country Case Study (HOCCS) performs a dual function: (a) to support the Strategic Dialogue for Education Ministers (SDEM) in preparing the SDEM agenda and generating innovative solutions and policy interventions (if required) in implementing the decisions reached by the SDEM; and (b) to deliberate on the inputs provided by the policy research, in-depth case study and other sources and propose innovative solutions and necessary actions and interventions.

The health sector, in particular, the health professionals in higher education in Southeast Asia has received limited attention in terms of student mobility, establishment of a credit transfer system and provision of qualifications standardization/framework. It is within these parameters that Module 2 focuses its theme on mutual recognition and harmonisation of higher education in general and in particular, on health professionals in Southeast Asia. To fully achieve one of the main objectives of Module 2 in its aim to harmonise higher education in general, specifically for health professionals, SEAMEO Regional Tropical Medicine and Public Health Network (SEAMEO TROPMED) was tasked by the SEAMEO Secretariat, the Executing Agency for the implementation of the SEAMEO College Project, to lead Module 2.

Module 2 Round 1 Forum was organized last 11-13 March 2015 and was participated by high education officials of the 11 Member Countries of SEAMEO as well as officials of relevant line ministries, officials of health professional regulatory boards, nursing and medical training institutions, international partner institutions of SEAMEO, selected SEAMEO Centres, and officials of SEAMEO Secretariat. A total of 59 participants attended the forum.

¹ Excerpt from the statement of HE Le Luong Minh, Secretary-General of ASEAN during the diplomatic briefing on the outcome of the 22nd ASEAN Summit, Jakarta, 29 April 2013.

The Round 1 forum aimed to:

- Provide a platform for SEAMEO high officials to share and discuss national and regional higher education frameworks with particular focus on nursing and medical professions;
- Identify common areas of cooperation on higher education with particular focus on medical and nursing professions and in support of further development of SEAMEO specializing in Regional Higher Education Development's (RIHED) ASEAN International Mobility for Students (AIMS) programme and ASEAN's Mutual Recognition Arrangement (MRA); and
- Recommend steps to promote greater higher education harmonization and student mobility in South East Asia (SEA) with particular focus on medical and nursing professions.

The next steps that were recommended by the Body to move the harmonization process in medical and nursing education within the country and in SEA included:

- Development of a Regional Database for Higher Education, Medical, and Nursing professional education
- Undertake a Comparative Study of Higher Education, Medical and Nursing Professional Education in SEA countries and the harmonization process taking place within the countries.
- Organization of a Regional and National Task Force on Higher Education, Medical and Nursing professions.

Thus, to implement the recommendations of Forum 1 this research was undertaken with the support of the relevant officials of medical and nursing professional education in the 10 ASEAN Member Countries.

II. Objective of the Research

The objective of this research is to undertake a Comparative Study of Higher Education, Medical and Nursing Professional Education in ASEAN Member countries and the harmonization process taking place within the countries.

The research has two components- nursing and medical professional education. This paper focuses on the current status of nursing professional education in each of the 10 ASEAN member countries to include:

- Policies on Higher Education and professions education in general and nursing education in particular, policies/ activities towards harmonization of education among ASEAN countries

- General Information of nursing profession education- types of nursing program, curricular/program structure, credit structure, methods of teaching-learning, methods of assessment of learning, entry requirements, degree requirements, number of schools offering the bachelor's degree in nursing
- Credit Transfer Scheme and student mobility-policy and system used
- Quality Control- process of approving of nursing program, approving body/agency, external accreditation body, nature of external accreditation (voluntary/mandatory)
- Requirements for entry to and continued practice of nursing
- National Qualifications Framework and descriptors

A discussion of similarities and differences among countries and recommendations for harmonization of nursing professional education are also presented.

III. Research Methodology

The research design employed was a case study design with the country as the study unit. The research used mixed methods for data collection. Official published documents were reviewed. Questionnaires were sent to all 10 ASEAN member countries. Key Informants Interview of officials from government agencies regulating higher education and nursing practice from five (5) selected countries- Malaysia, Indonesia, Philippines, Thailand and Vietnam were done from March 28 – April 22, 2016. The key informant's interviews conducted focused on the processes and policies for internal and external accreditation and student academic mobility and credit transfer.

The questionnaire focused on policies and activities towards harmonization, curriculum, entry requirements, methods of teaching and assessment of learning, student mobility and credit transfer, quality assurance, and requirements for entry to and continued practice of nursing, and National Qualifications Framework. Follow-up questions were emailed to the respondents to clarify or to get additional information on the data provided.

Nine (9) ASEAN members completed and returned the questionnaire emailed to them. The questionnaires were accomplished by the head or dean of a school of nursing. Where there were more than one school offering the bachelor degree program for nursing, the respondent conferred with the others and accomplished only one questionnaire. For some countries, the nursing program is under the school/college of medicine and the program is only a department. Hence, the department head responded to the questionnaire. The summary of sources and methods of data collection is presented in Table 1.

Table 1 Summary of Sources and Methods of Data Collection

Method of Data Collection	Source of Data (Document/Informant)	Data Collected
Records Review	<ol style="list-style-type: none"> 1. Nursing curriculum 2. Laws and regulations affecting education in general and nursing education 	<ol style="list-style-type: none"> 1. Curricular and course structure, degree granted 2. Education system, regulation and supervision of nursing education 3. Regulation of nursing practice 4. Registration and licensing
Key Informants Interview (KII)	<ol style="list-style-type: none"> 1. 4 countries (Malaysia, Indonesia, Thailand, Vietnam, Philippines) 2. Dean/ Program Head of Nursing Program 3. Nursing Council/ Nursing Regulatory Board Officials 4. President of National Nurses Association 5. Ministry of Education/Higher Education officials, Ministry of Health Officials 	<ol style="list-style-type: none"> 1. Curricular and course structure, degree granted, Education system, regulation and supervision of nursing education 2. Scheme for crediting of courses 3. Harmonization of nursing education activities 4. Credit transfer system 5. Academic student mobility 6. Quality Assurance of nursing education and practice 7. Regulation of nursing practice 8. Registration and licensing 9. Role of national nurses association in education and quality assurance 10. National Qualifications Framework (NQF)
Emailed Questionnaire	<ol style="list-style-type: none"> 1. Nursing school/college dean, program head 2. Nursing participants SEAMEO College Module 2 Round 1 	<ol style="list-style-type: none"> 1. Regulatory body for education in general and nursing education 2. Types of nursing program, number of schools, curriculum structure, length of program, course structure, scheme of crediting of courses, entry requirements, credit transfer scheme, methods of teachings, methods of assessment of learning outcomes, degree conferred, quality assurance system, registration and licensing for practice, national qualifications framework

Web search	<ol style="list-style-type: none"> 1. University websites 2. Official websites of country Nursing Councils/ Regulatory Boards of Nursing 3. Official websites of: International Council of Nurses (ICN), ASEAN Joint Coordinating Committee for Nursing (AJCCN), University Mobility Asia Pacific (UMAP), ASEAN University Network (AUN) 4. Published reports of Asian Development Bank (ADB), SEAMEO RIHED, Japan International Cooperation Agency (JICA), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO) 	<ol style="list-style-type: none"> 1. Program information and university profile 2. Regulatory policies and procedures 3. Data on nursing practice, registration and licensing 4. ASEAN core competency domains and indicators 5. Data on education, academic student mobility, nursing registration and licensing
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For the country that did not respond to the questionnaire, data were taken from the websites of the nursing board council and the website of a well-known university offering a bachelor degree program in nursing. The two websites accessed were active and contained the information needed to make a reasonable profile of nursing education and practice in the said country.

A web search was done to review literature on nursing education and practice from international agencies such as the World Health Organization (WHO), United Nations Educational, Scientific and Cultural Organization (UNESCO), Southeast Asian Ministers of Education Organization RIHED, ASEAN Secretariat, ASEAN Joint Coordinating Committee for Nursing (AJCCN), ASEAN University Network (AUN), and University Mobility for Asia and the Pacific (UMAP).

IV. Results

Country Profile

1. Brunei Darussalam

1.1 General Information on education

Higher education is provided by the Universiti Brunei Darussalam (UBD) and 3 other public universities and various technical and vocational institutes. The decree that governs higher education is the University Constitution which was promulgated in 1988. Higher education is under the supervision of the Ministry of Education. External accreditation of programs in higher education is done by the Brunei Darussalam National Accreditation Council.

1.2 Quality Assurance and Accreditation

For internal quality assurance, the University Senate approves the setting of the curriculum and is also responsible for internal quality assurance of the program. The regulatory body is governed by the Nursing Board of Brunei under the Ministry of Health. Nursing Board for Brunei or the Board is a Regulatory Body established under the Nurses Registration Act as stipulated in the Laws of Brunei that governs and regulates the practice of nursing in Brunei Darussalam. The Board came into force in 1988. They are responsible for registration of all nurses/midwives working in Brunei.

Brunei Darussalam National Accreditation Council (BDNAC) established in 2011 is responsible for external quality assurance of higher education (all programs). Functions and Responsibilities of the BDNAC:

1. To consider and evaluate the status and quality of qualifications awarded by various local and overseas institutions.
2. To set up, if necessary, appropriate committees including special and ad hoc to assist the Council pertaining to the evaluation and assessment of qualifications in various subjects or disciplines.
3. To act upon matters relating to the Council's responsibilities either as directed by His Majesty the Sultan and Yang Di-Pertuan of Brunei Darussalam or if and when the Council considers it appropriate and necessary to do so.
4. To review the status of any qualifications as and when the Council sees it fit or necessary.

The standard setting for Bachelor of Health Science (BHSc) (Nursing) is done by an external peer review on curriculum by Queens University Belfast UK.

1.3 Student Academic Mobility & Credit Transfer

UBD follows ASEAN Credit Transfer System (ACTS) for nursing student's mobility programme since they are members of AUN. This is mainly during their Study Abroad

Programme (SAP) or Student Exchanged Programme (SEP) during Discovery Year (DY) years.

Universiti Brunei Darussalam (UBD) creates opportunities for fruitful collaborations between UBD and its international partners for academic and student mobility through exchange programmes and fellowship

1.4 National Qualifications Framework

BQF (Table 2) has eight (8) levels. BQF 6 is the Level given to bachelor degree with the descriptor as: a systematic, research-based, coherent, introduction to the knowledge, ideas, principles, concepts, and basic research methods and to the analytical and problem solving techniques of a recognized major subject or subjects.

Table 2 The Brunei Darussalam Qualifications Framework

BDQF Levels	School Sector Qualifications	Technical and Vocational Education Sector Qualifications	Higher Education Sector Qualifications
8			Doctoral Degree
7			Master's Degree Post Graduate Diploma Post Graduate Certificate
6			Bachelor's Degree
5		Advanced Diploma Higher National Diploma (HND)	Foundation Degree Advanced Diploma Higher National Diploma (HND)
4	GCE "A" Level IGCSE "A" Level IB Diploma STPU	Diploma Higher National Technical Education Certificate (HNTec)	
3	GCE "O" Level (Grades A- C) IGCSE and GCSE "O" level (Grade A –C) SPU (Grades A-C) BTEC Level 2 Diploma	Skills Certificate 3 (SC 3) National Technical Education Certificate (NTec)	
2	GCE "A" level (Grades D-E) IGCSE and GCSE "O" level (Grade D –E) SPU (Grades D) BTEC Level 2 Extended Certificate	Skills Certificate 2 (SC 2) Industrial Skills Qualifications (ISQ)	
1	BTEC Level Introductory Certificate	Skills Certificate 1 (SC 1)	

1.4.1 Descriptions of Qualifications Level

An **Advanced Diploma and Foundation Degree awarded at Level 5** consist of programmes designed to facilitate student successful progression to the full degree or directly to employment. These degrees focus on learning within a work context, underpinned by both vocational and academic understanding, and enables learners to demonstrate learning outcomes that are explicitly relevant to employment and professional requirements. An Advanced Diploma or Foundation Degree recognizes technician, technologist, managerial and professional level skills and knowledge.

A **Bachelor Degree awarded at Level 6** is a systematic, research-based, coherent, introduction to the knowledge, ideas, principles, concepts, and basic research methods and to the analytical and problem-solving techniques of a recognized major subject or subjects. A program leading to this qualification usually involves major studies in which significant knowledge is available. Program content is taken to a significant depth and progressively developed to a high level, which can provide a basis for postgraduate study and professional careers.

1.5 Nursing Education

There are 4 public universities that offer bachelors and masters in nursing programs. Polytechnics institutes offer diploma program for nursing.

Only the Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah (PAPRSB) Institute of Health Sciences, Universiti Brunei Darussalam offers the Bachelor of Health Science (Nursing) which is a four year degree programme. The curriculum is based on “outcome-based” competency principles. It is student-centered which value both learning in an academic setting and in the workplace. It is a combination of 50% theoretical study and 50% clinical practice placements. The fundamental principles of the program focuses on preparing the individual to become knowledgeable, competent, flexible, skilled and accountable practitioners based on an ethos of lifelong learning.

1.5.1 Curricular Structure

From 2013 onwards for the degree requirements, the student must “accumulate a minimum of 150 modular credits” from a combination of major core (74 modular credits), major optional modules (12 module credits) and breadth modules (64 module credits). At least 16 modular credits will have to be taken from outside the Faculty including general education modules.

One module is four (4) contact hours per week for fourteen (14) weeks for lecture courses. While for clinical course, one module is equivalent to a total students’ workload of 8-10 hours per week for fourteen (14) weeks. The medium of instruction at the tertiary level is in English.

Students in the 3rd year undergo a “Discovery Year (DY) program” wherein they go to Partner institutions abroad for one semester (14 weeks) to 2 semesters (28 weeks). The program includes study abroad program or study exchange program, internship, incubation projects, community work either locally or abroad.

1.5.2 Entry Requirements

1. English Language requirement
2. “A” Level Qualification or its equivalent in relevant subjects including Biology, Chemistry, Mathematics or Physics.
3. Must pass the Multiple Mini-Interview (MMI) which consists of multiple stations to assess the students’ knowledge and attitudes.
4. Must pass Medical fitness

1.5.3 Methods of Teaching and Methods of Assessment of Learning

The methods of teaching and learning include modified lectures, guided study, Problem/Enquiry Based Learning (PBL/EBL), independent reading, group discussion and presentation.

The teaching of clinical skills take place through a variety of mechanisms including simulation learning, clinical skills laboratory work and learning and teaching by mentors in clinical areas. The clinical practice placements begin on the 9th week of the programme and thereafter interspersed throughout the three years of the programme. When on practice placement, students work following the shift pattern of the placement. This include early shifts (7.00am – 2.00pm) and late shifts (2.00pm – 10.00pm). During the final semester students will undertake night-duty shifts. There is at least 12 weeks of intensive supervised clinical practice.

Students are assessed on the overall performance in each module, a combination of coursework and examinations. Some modules may have 100% coursework. Continual assessment grade is a combination of grades from different pieces of class work.

The assessment strategies adopted are designed to enable the semester and module learning outcomes to be assessed. Credits will be awarded only for the summative assessment and this could take various forms.

For theoretical knowledge- A variety of assessment methods are used throughout the program to accommodate a range of learning styles.

- There is invigilated end semester written examination. The length of any such examination will not exceed two hours.
- The theoretical assignment is no more than 2000 words

For practical skills- Practice skills assessment takes place in skill laboratory (Objective Structure Clinical Examination -OSCE) and in the clinical environment. Students are assessed by the teaching staff from PAPRSB Institute of Health Sciences /Clinical Mentors / Supervisors from the Ministry of Health.

1.6. Requirement to Practice Nursing

There is no national licensure examination required after graduation in order to practice nursing. All that is needed is to register with the Nursing Board of Brunei under the Ministry of Health. The license is renewed annually.

2. Cambodia

2.1 General Information on education

The agency providing oversight for nursing education in Cambodia is the Ministry of Health for Government Supported School of Nursing (5 Schools) and Ministry of Education for Private School of Nursing (8 Schools). At present, there is no external accrediting agency providing quality control of educational programs including nursing program. There 14 institutions of higher education offering bachelors, 5 of which are public and 9 private.

2.2 Quality Assurance

Accreditation of courses taken outside Cambodia is done by the Ministry of Education, Accreditation Certifying Committee (ACC).

Accreditation of higher education institutions is under Accreditation Commission of Cambodia, Ministry of Education. Accreditation is compulsory. There are three (3) types of accreditation status: full (5yrs); provisional (3yrs); candidacy (1yr).

The role of the Ministry of Health is to recognize the nursing program and give entrance exam and exit exam.

2.3 Credit Transfer System

For the transfer credit, UHS is not doing it yet, but students who finished foundation year can transfer from their University to UHS.

2.4 National Qualifications Framework

To support the National Technical and Vocational Education Training (TVET) Development Plan, the Cambodia Qualifications Framework (CNQF) comprising eight levels was finalized and presented at the sixth meeting of the National Training Board (NTB); and approved at the Board's eight meeting on 17 February 2012 (Figure 1).

2.4.1 Learning Outcomes

Learning outcomes are measured based on 5 domains:

1. Knowledge;
2. Cognitive skills;

3. Interpersonal skills and responsibility
4. Communication, Information Technology and numerical skills;
5. Psychomotor skills (for technical and vocational)

Knowledge- The ability to recall, understand, and present information including:

1. Knowledge of specific facts,
2. Knowledge of concepts, principles and theories, and
3. Knowledge of procedures.

Cognitive skills- The ability to apply understanding of concepts, principles, theories and procedures in critical thinking and creative problem solving, both when asked to do so and when faced with unanticipated new situations.

Interpersonal skills and responsibility- The ability to:

1. Take responsibility for their own learning and continuing personal and professional development,
2. Work effectively in groups and exercise leadership when appropriate, act responsibly in personal and professional relationships, and
3. Act ethically and consistently with high moral standards in personal and public forums.

Communication, information technology and numerical skills

The ability to:

1. Communicate effectively in oral and written form,
2. Use information and communications technology, and
3. Use basic mathematical and statistical techniques.

Psychomotor skills

The ability domain that applies to only some programs involving in technical trades and occupations such as tradesman or a major equipment operator and for a surgeon, an artist, or a musician.

2.4.2 Study Pathways

1. Accumulation and transfer of credits;
2. Accreditation of Recognition of Prior Learning (RPL);
3. Possible opportunities; and
4. Learning pathways for individual progress

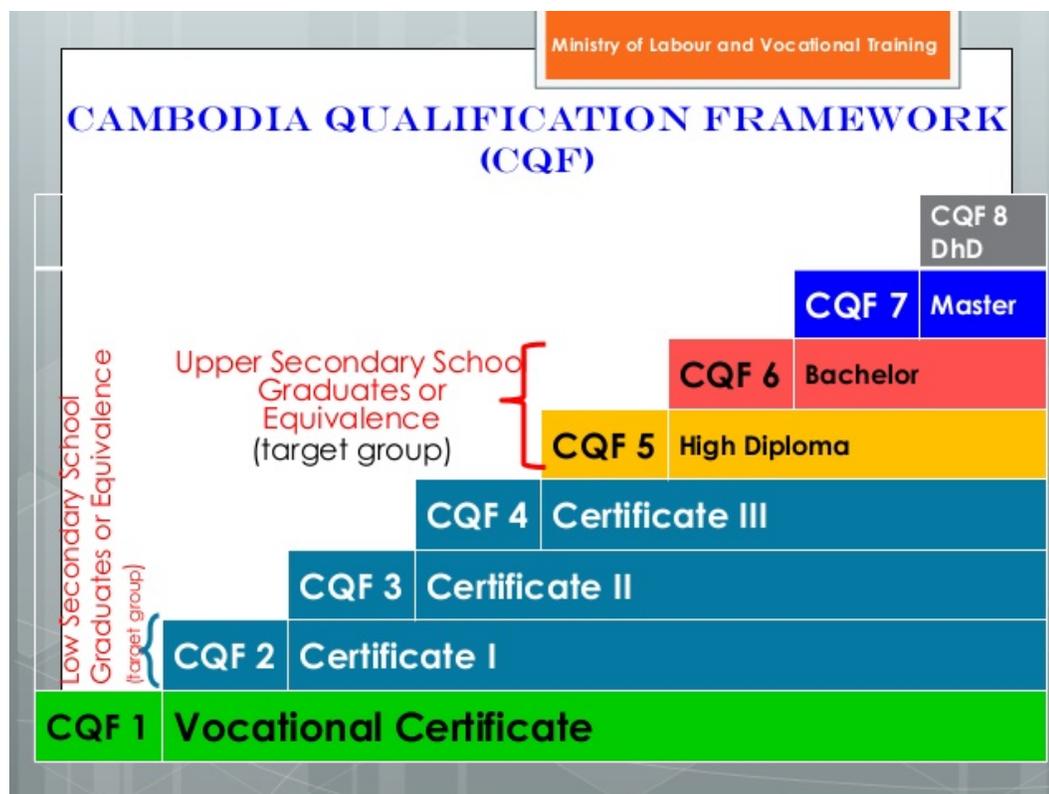


Figure 1
Cambodia Qualification Framework

2.5 Nursing Education

There are three (3) types of nursing programs: a) International Program in Nursing (IPBN), b) Bridging Program in Nursing and c) Bachelor of Nursing Science (BNS) Degree program (direct entry).

The University Health Science (UHS) in Phnom Penh offers the International Program Bachelor of Nursing (IPBN) in collaboration with Habron Medical Center (Korean Hospital) in Cambodia. IPBN is study 3 years 6 semesters after finished foundation year.

The Bridge Program is for diploma graduates of the 3 year Associate degree program. The University of the Philippines Manila assisted the UHS in its initial offering of the Two-Year Bridging Program in 2012 and graduated the first batch in 2014. The first batch who participated in the Bridging Program were nursing leaders who held management positions either chief nurse or supervisor positions in the Ministry of Health.

A small number of private schools in Cambodia have recently developed BNS programs.

2.5.1 Entry Requirements

The requirement to enter the nursing program (BNS) direct entry is a high school diploma or equivalent recognized by the Ministry of Education Youth and Sport. Just recently required is successful passing in the National Entrance Exam.

For the IPBN, selection is at the end of the foundation year. Entry requirements are:

1. Successful academic achievement *in foundation year*
2. English test from ACE placement test result at least level 5 (medium of instruction is in English)

2.5.2 Methods of Teaching and Methods of Assessment of Learning

A variety of teaching methods are utilized such as large group teaching (lecture), small group discussion, skills laboratory and related clinical experience.

Every end of the semester, summative examination is given. Also an exit examination is given at the end of the fourth year.

2.6 Requirement to Practice Nursing

Currently there is no nursing law and nursing regulation. However, a nurse needs to pass the National Exit exam after graduation given by the Ministry of Health which was started in 2012. Also in the same year, the country started to develop the scope of standards for Professional Nursing Practice.

As of 2015, there are only 52 bachelors prepared nurses in the entire country. For the first time in 2014, graduates from nursing programs were required to gain certification by passing a government sponsored exam based on a curriculum developed in conjunction with the Ministry of Health (MoH).

After passing national exit exam, they already register to practice with Medical Council which also covers nursing practice and the Council is under Ministry of Health.

3. Indonesia

3.1 General Information on education

The main policy of higher education system in Indonesia is based in the Act no. 20, 2003 on the National Education of Indonesia, the Government Regulation no. 19, 2005 on the National Standard of Education and the Minister of Education decree no. 28, 2005 on National Accreditation Agency for Higher Education. The educator is regulated under the Act No. 14, 2005 on Teacher and Faculty Member. While, the higher education institutions (HEIs) are regulated under the Act no. 9, 2009 on Legal Entity.

The National Education act, verse 60-61 and the related Government Regulation (GG) no. 19, 2005, states that the existence of a Quality Assurance unit and accreditation is mandatory.

3.2 Credit Transfer and Student Mobility System

The core nursing curriculum (BSN) was developed by the group of nursing experts coming from Association of Indonesian Nurse Education Center (AINEC), Indonesian National Nurses Association (INNA) and the Ministry of Health. The core nursing curriculum developed is commonly implemented in all the bachelor degree programs in nursing and is equivalent to 70% of the actual curriculum implemented by a school/college. The Higher Education Institutions (HEI) is given flexibility and is allowed to add the 30% credits based on its own vision, mission and values.

Private universities allow transfer of credits taken in another university based on learning outcomes. However, student mobility especially among public/state universities is affected by level of accreditation of the program, i.e. if the program accreditation Level is Very Good (B), the student cannot transfer to a Level Excellent (A) nursing program as well as the grades obtained in the courses taken. Only 50% of courses obtained from outside the university (within Indonesia) can be credited.

If a nurse is a Diploma III graduate, s/he needs to have at least two (2) years of experience before being allowed to enrol in the bachelor degree program. Recognition of prior learning (RPL) is given up to 72 credits. The student is required to take another 72 credits in the BSN program which may take another two (2) years. After which, the BSN graduate must do the internship/clinical for one (1) year before being qualified to take the national competency examination. Diploma I and Diploma II graduates of nursing can avail of RPL provided the nurse had at least 10 years of work experience.

The Ministry of Research, Technology and Higher Education accredits the study abroad program. Actual crediting is based on the learning outcomes and is done by the university concerned. Only 75% of semestral credits are accepted from an international program. For credit transfer for ASEAN countries, the Ministry of Research, Technology and Higher Education follows the ASEAN International Mobility for Students (AIMS). Credit transfer/ student mobility is allowed provided there is a Memorandum of Agreement (MOA) between the two HEIs “university to university agreement”.

3.3 Quality Assurance and Accreditation

Indonesian Accreditation Agency for Higher Education in Health (IAAHEH) or in Indonesian, the LAM-PTKES, accredits programs for higher education in the health professions. While, BAN-PT accredits the institution of higher education. A more detailed description of the accreditation process for quality assurance is found in section on the three country models.

3.4 National Qualifications Framework

There are two (2) levels for the nursing graduates in the Indonesian Qualifications Framework (IQF). The IQF Level 5 is for the vocational level, Diploma III and IQF Level 6 is for the Academic Phase Nursing Program (BSN 4 years). After completing the one (1) year internship, the nurse completes the Ners Program (4Years + 1) and is considered IQF Level 7. (Figure 2)

IQF descriptors consist of two (2) parts: 1) general description describing characteristics, personalities, working attitude, ethics, morality of every Indonesian human being and applied to every level; 2) specific description describing science, knowledge, know-how, skills, and competencies mastered by a person depending on his level. The specific descriptors comprises of four main elements: (a) skills in fulfilling the job and competence, (b) coverage of science and/or knowledge, (c) methods and levels of competence in applying science/ knowledge, and (c) management skills.

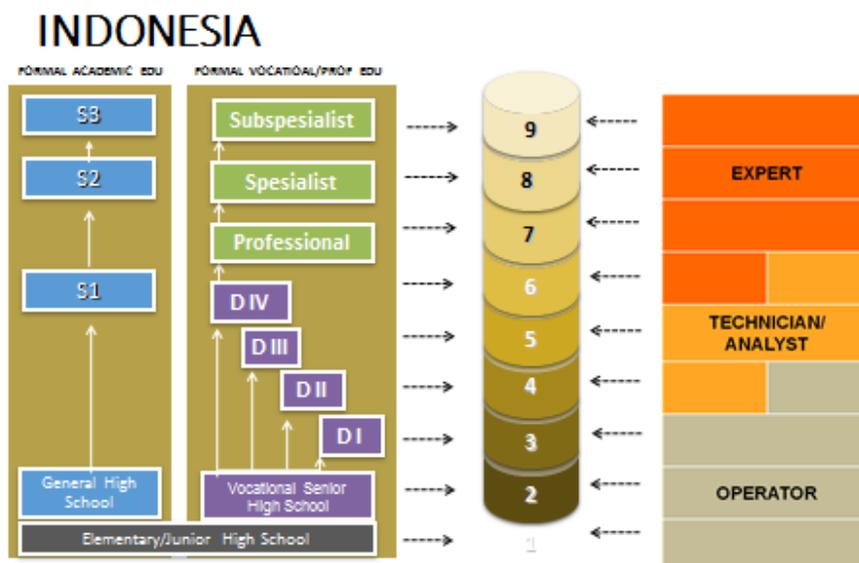


Figure 2
Indonesian Qualification Framework (IQF)

3.5 Nursing Education

The nursing program is approved by the Ministry of Research, Technology and Higher Education. External accreditation of the institution of higher learning offering the nursing program is done by BAN-PT while the nursing program is accredited by Lembaga Akreditasi Mandiri Pendidikan Tinggi Kesehatan (LAM-PTKES) since

2015. As of 2015, there are 445 schools offering Diploma III nursing program and 277 schools/colleges offering BSN.

3.5.1 Curricular Structure

The Bachelor of Science in Nursing (BSN) is a four (4) year competency-based program which requires 144 credits for the Academic phase. Then, the graduate takes internship/ clinical practicum for another one (1) year (36 credits) for the professional phase before the nursing graduate can take the national competency examination.

One (1) credit of theory is equivalent to 16 hours and one (1 unit) of clinical practicum is equivalent to 64 hours (4 hours x 16 weeks).

The core nursing curriculum (BSN) was developed by the group of nursing experts coming from Association of Indonesian Nurse Education Center (AINEC), Indonesian National Nurses Association (INNA) and the Ministry of Health. The core nursing curriculum developed is commonly implemented in all BSN programs and is equivalent to 70% of the actual curriculum implemented by the school/college. The HEI is given flexibility and is allowed to add the other 30% credits based on its own vision, mission and values

3.5.2 Entry Requirement

Entry requirement for BSN is completion of Grade 12 high school graduate.

3.5.3 Methods of teaching and Methods of Assessment of Learning

The teaching-learning methods used is a combination of a variety of methods based on student-centered learning approaches like for the classroom- problem based learning, small group discussions, collaborative learning, mini-lecture or expert lecture, project-based learning, case study etc. ; for skills laboratory- demonstration. Simulation, role play etc. While for clinical experience activities, the methods used are also varied like pre-post conference, bedside teaching, preceptorship, field study etc. Assessment of learning focused on learning outcomes/ competencies both formative and summative also using a variety of methods like MCQ, OSCE, oral test, reflection for self and peer-evaluation, nursing care documentation etc.

3.6 Requirement to Practice Nursing

Since 2015, the National Exit Examination or Competency Test is taken by a graduate of the Ners Program. The National Exit Exam is computer-based which is given by the Ministry of Research, Technology and Higher Education under the Office of Quality Assurance. If the nurse fails the examination, s/he can re-take (without limit) until s/he passes it. The content of the examination is contributed by INNA, AINEC, Association for Vocational Schools of Nursing (AIPVIKI) offering diploma program.

After passing the national competency test, the nurse registers with MTKI since the Council of Nursing is still under development. Registration is different from license. If a nurse wants to practice nursing, s/he must first register, then get a license to practice

from the province s/he intends to practice. Renewal of license is every five (5) years with required 25 credits Continuing Professional Development (CPD).

To ensure quality of service, CPD is required. Component of CPD is composed of: professional practice (10-20%), community service (0-20%), education/ training (40-80% and science development (0-20%).

4. Lao PDR

4.1 General Information on education

Health Professions education is under the supervision and monitoring of the Department of Training and Research, Ministry of Public Health and by Ministry of Education.

4.2 Credit Transfer System and Student Mobility

Student mobility system has not yet been introduced but if there is MOA or Memorandum of Understanding (MOU) with a foreign university, the institution recognizes it.

There is credit transfer system for within country courses taken. For example, courses taken in the diploma program are credited towards the BNS (continuing education program) so that the nurse needs only 2.5 years to earn the bachelor degree.

4.3 Quality Assurance for Education

The government body that is responsible for setting educational standards for the health professions education is the Educational Development Centre which was established in 2011 and is part of the University of Health Sciences. Its main role is to improve the quality of health professional development through improvements in the training curricula, teaching skills, educational resources, materials and the educational facilities.

At present there is no external accrediting body for the nursing program. However, there is a plan to have an external accreditation process.

4.4 National Qualifications Framework

The draft Lao PDR National Qualifications Framework (LNQF) has been developed and awaiting approval Draft has 7 Levels and 4 domains: knowledge, skills, application, social skills (Table 3).

To implement the NQF, the Ministry of Education and Sport and the Ministry of Labour and Social Welfare, in close coordination with international organizations and donors, e.g. ILO, ADB, German Development Cooperation, etc., are in the stage of creating instruments and classifying qualifications according to a set of criteria for levels of learning outcomes.

Table 3 Lao PDR National Qualifications Framework

Qualification Level	Ministry of Higher Education and Sports (MoES)	
Professional 7	PhD	
	Specialist 2	
	Master's degree	
	Specialist 1	
	Graduate Diploma	
6	Bachelor's degree	Bachelor's degree
5	Associate degree	Higher diploma/ high technician
4		Diploma 2/ technician
3		Diploma 1/ Certificate 4/ skilled worker
2		Certificate 3/ Semi-skilled
1		Certificate 2/ practical skills
		Certificate 1/ basic skills

4.5 Nursing Education

There are different types of nursing programs but only one university, the University of Health Sciences, offers a Bachelor of Nursing Sciences (BNS). This BNS program was started in 2011. There are two curricular designs for the BNS. One is the direct entry program which is 4 years and the BNS (continuing education) which is taken for 2.5 years after the 3 year high diploma in nursing.

4.5.1 Curricular structure

The curriculum is competency-based and the school is allowed to create its own learning outcomes based on the national standard of nursing competencies. The bachelor program 4 year has a total of 142 credits composed of:

1. Pre-clinical 62 credits
2. Clinical 72 credits
3. Community rotation 4 credits
4. Core elective are: foreign language, and computer 4 credits

One hour of lecture/ theory part is given one (1) credit unit. Two hours of demonstration or skills laboratory is given one (1) credit unit while four hours of practice or clinical practicum is given one (1) credit unit.

4.5.2 Entry Requirements

Entry into the nursing program requires that the student is a graduate of Upper Secondary education (12 years) and pass the national examination on mathematics, biology, chemistry and Lao culture. The national examination is given every July.

4.5.3 Methods of Teaching and Methods of Assessment of Learning

There are common methods of teaching used which are small group discussion and large group lecture. There are varied methods used both for the formative and summative evaluation. Among the assessment methods used are essay, Multiple Choice Questions (MCQ), case study and Observed Structured Clinical Examination (OSCE).

4.6 Requirement to Practice Nursing

The authority for registration of health professionals is Department of Health Care, Ministry of Health. Until recently, the health staff members in the public health facilities have simply been recruited as civil servants and have been practicing without licenses. However, the healthcare professional licensing strategy has been approved and the giving of licensure examination for nurses is planned to be the next step.

4.7 Nursing Association

At present, there is no association of deans of schools of nursing nor association of professional nurses.

5. Malaysia

5.1 General Information on education

The Ministry of Higher Education (MOHE) is the government agency that approves and regulates education programs. The diploma program for nursing is under the supervision of the Ministry of Health. There are ten public schools that offer the bachelor degree program for nursing and twenty private schools offering both bachelor program and diploma program for nursing.

5.2 Student Mobility and Credit Transfer

Accreditation of Prior Experiential Learning (APEL) is a systematic process done to determine the extent to which an individual has achieved the desired learning outcomes for access to a program of study and/or award credits. Credit transfer recognizes credits earned by the students from other programs/ institutions. A student who has taken and passed a course in a program of study, can apply for course transfer to a new study program subject to the following conditions:

1. Equality of curriculum/ syllabus- equality of at least 80%

2. Passing grade- the student must have achieved a minimum grade of “C” for the course
3. Credit score- courses for credit must have equivalent credit score to the program to be followed
4. Accreditation- the courses to be given credit must be from a program that is accredited

Credit transfer as much as 30% of courses taken either diploma or bachelor program from private or public schools in Malaysia is allowed. Some universities accept foreign students to enrol under their University Student Mobility Program for one semester to one year. Individual universities have their own policy for crediting of courses. Mobility for international nursing experiences of Malaysian students are allowed but no transfer credit given.

5.3 Quality Assurance and Accreditation

Done jointly by the technical accreditation committee composed of representatives of Malaysian Qualifications Agency, MOHE and Nursing Board of Malaysia (NBM)

For nursing, the professional body to regulate nursing profession through licensing of the nurses is the Nursing Board of Malaysia. Nursing program must be accredited before students can graduate. Nursing program must be accredited before the students sit for the Nursing Board of Malaysia exam.

The program must have full accreditation to obtain recognition from the Nursing Board of Malaysia (NBM).

5.4 National Qualifications Framework

Malaysian Qualifications Framework (MQF) has 8 Levels. Bachelor degree graduate is MQF Level 6 (Figure 3).

Qualification levels indicate levels of expected capabilities described with generic features in terms of:

1. Depth, complexity and comprehension of knowledge
2. Application of knowledge and skills
3. Degree of autonomy and creativity in decision making
4. Communication skills
5. Breadth and sophistication of practice

MALAYSIA

MQF Levels	Sectors			Life Long Learning Accreditation of Prior Experiential Learning AP/EL
	Skills	Vocational & Technical	Higher Education (Academic & Professional)	
8			Doctoral Degree	
7			Masters Degree Postgraduate Cert. & Diploma	
6			Bachelors Degree Graduate Cert. & Diploma	
5	Advanced Diploma	Advanced Diploma	Advanced Diploma	
4	Diploma	Diploma	Diploma	
3	Skills Cert. 3	Vocational & Technical Certificate	Certificate	
2	Skills Cert. 2			
1	Skills Cert. 1			

Figure 3
Malaysian National Qualifications Framework

5.5. Nursing Education and curricular structure

The nursing bachelor program is outcomes-based which is a four year program or eight semesters of full time study. The pre-registration bachelor program requires a minimum of 120 to maximum of 140 credit units to graduate. The diploma program is a three year program and requires a minimum 90 credit units to a maximum of 100 credit units to graduate.

Two weeks of practical hours/ clinicals (42 hours per week) is equivalent to one credit while forty (40) notional hours is given one credit. The percentage for theory and practical credit hours for nursing sciences component is 45-55% theory and 45-55% clinical practice placement.

The primary medium of instruction is English.

5.5.1 Entry Requirements

For the bachelor degree in nursing program (pre-registration degree), the following are the mandatory requirements for Malaysian candidates as well as for international students.

1. Language requirement- All students should have a score of at least 515 in the Test of English as a Foreign Language (TOEFL) or 6.0 points in the International English Language Testing Services (IELTS) or English Placement Test (EPT).
2. Academic requirement- obtained at least a “B” at Sijil Tinggi Persekolahan in the subjects Biology, Chemistry, Physics (Secondary year 6), and obtained at least Grade 6C at Sijil Pelajaran Malaysia level in Mathematics or additional Mathematics subjects (Secondary year 5)

5.5.2 Methods of Teaching and Methods of Assessment

Theory must be followed by practical placement in every semester. Common methods of teaching are problem-based learning, group discussion, large group discussion, site visit and community posting. The assessment methods use both formative and summative evaluation. Common methods of assessment of learning are written examination, OSCE, oral examination, practical skills examination, objective examinations, case study, final year project.

5.6 Requirement to Practice Nursing

Upon successful completion of the programme, the students are eligible (both bachelor degree and diploma graduate) to sit for the Nursing Board of Malaysia (NBM) Examination to be licensed to practice as a Registered Nurse. NBM examination is given every quarter. Upon passing the NBM examination, the nurse registers with the Nursing Board of Malaysia. Renewal of practicing certificate is done annually.

Temporary Practicing Certificate (TPC) is issued to foreign trained nurses who wish to seek employment in Malaysia provided they fulfil the criteria required by the Nursing Board of Malaysia.

5.7 Nursing Association

The organization of nurses is the Malaysian Nurses Association and membership is voluntary.

6. Myanmar

6.1 General Information on education

Higher education is under the supervision of the Ministry of Education. For the nursing program, according to the Law relating to the Nurse and the Midwife of 1990, the Ministry of Health shall form the Nurse and Midwife Council which has been given the mandate to a) hold entrance examination of Nurse and Midwife Training School, b) draw up curriculum for the nursing and midwife professions, and c) raise the standard of nursing profession and the Midwife profession to reach international level among others.

There are three (3) universities offering the bachelor degree program: University of Yangon, University of Mandalay and Defence Services Institute of Nursing and Paramedical Science. There are sixty (60) schools offering the diploma program for nursing.

6.2 Student Mobility and Credit Transfer

Currently there is no credit transfer system in place for courses taken abroad. However, internal mobility is allowed since all health professions institutions are under the Ministry of Health, and there are only 15 including 5 Medical and 2 Nursing Universities. The nursing program has a common curriculum and common exam.

6.3 Quality Assurance

The National Education Law of 2014 promulgated the creation of the National Education Commission. The Commission shall form an independent Higher Education Cooperation Committee which shall negotiate on matters related to higher education. According to the Law in the assessment of educational quality and standards, there should be a program of internal quality assessment and external quality assessment. Further the Commission shall gather appropriate people to form an independent National Education Standard and Quality Assurance Committee to carry out the work of quality assurance as an external accrediting body.

The policy of the government is to assure the quality of programs run by the university and graduates of the university. The plan is to have a mechanism to establish the Quality Management System and to follow the ASEAN University Network (AUN) Quality Assurance (QA) guidelines and develop the International Quality Assurance (IQA) criteria for institution.

6.4 National Qualifications Framework

The Myanmar National Qualifications Framework (Figure 4) was started to be developed in 2013 and the proposal has eight levels. The government will initiate its referencing work by 2017.

As of February 2015, in the draft NQF, the bachelor degree graduate is categorized as Level 6.

Proposed Myanmar National Qualification Framework				
Level	Sectors			Lifelong Learning
	Basic Education	TVET	Higher Education	
8			Doctoral Degree	Recognition of Prior Learning (Assessment and Validation) *Vocational & Technical Certificate / Skills Certificate (V&TC/SC)
7 A			Masters' Degree	
7 B			Post Graduate Diploma	
6		Degree	Bachelor degree	
5 A		Advanced Diploma	Associate degree	
5 B		Diploma	Diploma	
4		V&TC/SC 4		
3		V&TC/SC 3		
2	High School	V&TC/SC 2		
1	Middle School / Primary School	V&TC/SC 1		

Figure 4
Proposed Myanmar National Qualification Framework

6.5 Nursing Education and Curricular Structure

The bachelor degree program has been changed from three (3) years to four (4) years to harmonize with the ASEAN requirement for bachelor degree. There are two (2) kinds of degree programs- the direct entry generic course BNSc (4 years) and the bridge program which is a two (2) year program. The bridge program is open to government nurses holding diploma for nursing certificate with two (2) years services. The diploma program is a three (3) program.

6.5.1 Entry Requirements

Direct Entry to the bachelor program is completion of Standard 11th Grade. The interested student must first pass the University Entrance Examination given by the Nursing and Midwife Council. Universities are supported by government funds and admission is highly selective.

6.5.2 Methods of Teaching and Methods of Assessment

Medium of Instruction can be in Myanmar language or English or a combination of both.

6.6 Requirement to Practice Nursing

Upon completion of the nursing program, the graduate needs to pass the board examination. The board examination is given by the Myanmar Nurse and Midwife Council. After passing the examination, the nurse who wants to register must apply with Nurse and Midwife Council. Any registered nurse who wishes to get a license to practice must apply to the regulatory body, the Department of Health Professional Resource Development and Management, Ministry of Health.

Renewal for local nurses is every two (2) years. For foreign nurses only temporary registration is given. A new law is being crafted at present to accommodate foreign nurses.

6.7 Nursing Association

There is no existing nursing association for nurses but there is the Myanmar Nurse and Midwife Association.

7. Philippines

7.1 General Information on education

The Philippines has three (3) government agencies regulating education in the country. The Commission on Higher Education (CHED) supervises HEIs in the provision of educational services at the tertiary level, Department of Education (DepEd) supervises basic education and the Technical Education and Skills Development Authority (TESDA) supervises technical and vocational education.

At present, there are 1,935 HEIs excluding satellite campuses and of these 227 (12%) are public and private HEIs are 1,706 (88%). There 366 nursing programs offered in the country and majority (309) are offered by private institutions of higher education.

7.2 Student Mobility and Credit Transfer

For within country mobility and credit transfer, Republic Act (RA)10647 known as the Ladderized Education Act of 2014 has clear stipulations on the mechanisms for credit transfer of prior learning. Credits earned from different modalities are credited by the institutions (Sec. 3 c). Equivalencies and pathways are defined to allow people to move easily and readily between different education and training sectors and between these sectors and the labor market.

For universities which are members of ASEAN University Network (AUN) and the University Mobility for Asia and the Pacific (UMAP) they apply the policy and standards of each of the agencies. Most universities allow credit transfer and student mobility based on Memorandum of Agreements forged between participating universities.

CHED Memo 33 series 2013 Policies and Guidelines on University in Asia and the Pacific (UMAP) Credit Transfer Scheme (UCTS) which recognizes the UCTS as a viable system of credit transfer student's earning of credits among UMAP HEIs participating in an exchange program.

7.3 National Qualifications Framework

Philippine Qualifications Framework (PQF) (Figure 5) has 8 Levels with 3 domains-

1. Knowledge, skills and values
2. Application
3. Degree of independence

Professional with a bachelor degree like BSN is PQF Level 6. Its descriptors are:

Knowledge, skills and values- demonstrate broad and coherent knowledge and skills in their field of study for professional work and lifelong learning

Application- application in professional work in a broad range of discipline and/ or for further study

Degree of independence- substantial degree of independence and or in teams of related fields with minimal supervision.

THE PHL QUALIFICATIONS FRAMEWORK

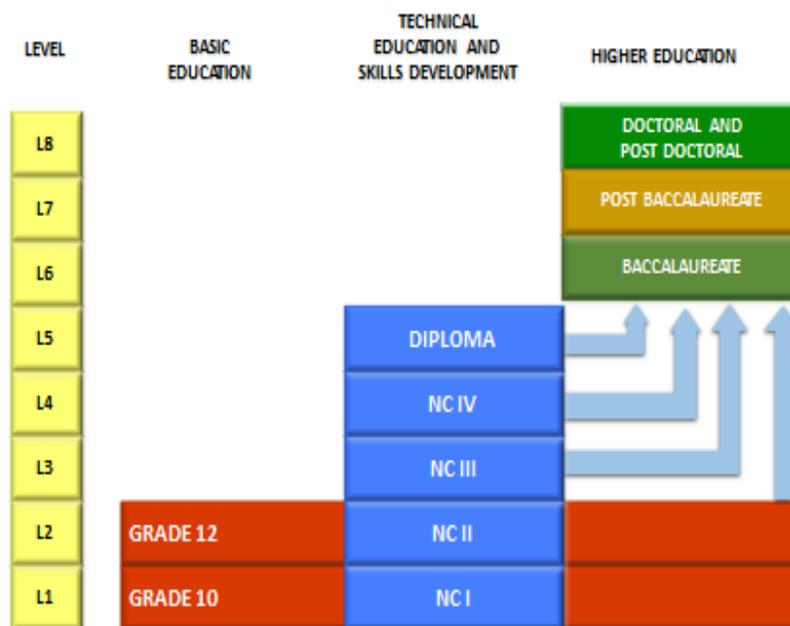


Figure 5
Philippines National Qualification Framework (PQF)

7.4. Nursing Education and Curricular Structure

There is only one program for nursing in the country. This is the Bachelor of Science in Nursing (BSN) which is a four -4.5 year's full time study. The curriculum is outcomes-based and competency based. It is composed of both theory and practice. The curriculum has a total of 202 credit units composed of 87 units of general education courses and 115 units of professional courses. Clinical experience or commonly known as Related Learning Experiences (RLE) is integrated as early as in the first year. A total of 2,346 hours of RLE is completed by the student over the four year program. One (1) credit is equivalent to 16 hours of theory or 54 hours laboratory class or 51 hours RLE.

7.4.1 Entry Requirement

To qualify to enter the BSN program, the applicant must be a high school graduate and must pass the admission test given by the school. Good health is also a requirement. Until School Year 2017-18, admission to tertiary education requires only completion of Grade 10. By school year 2018-19, requirement for admission will already be completion of Grade 12.

7.4.2 Methods of Teaching and Methods of Assessment

A variety of teaching-learning methods are utilized such as for classroom- large group exposition with discussion, small group discussion, concept mapping, case analysis, problem-based learning; literature review; for laboratory or skills laboratory- lecture-demonstration, film viewing, simulation, role playing; for clinical exposure- bedside teaching, nursing rounds, case study, oral presentation, nursing care plans.

A variety of methods for both formative and summative assessment of learning are employed. Common methods used are written examination using various types of objective tests, essay, projects, research reports, oral examination, and assessment of skills is through OSCE. For clinical practicum- nursing care plan, case study, oral case presentation

Each HEI is free to have its own grading system.

7.5 Requirement to Practice Nursing

A graduate nurse needs to pass the National Licensure Examination for Nurses which is given twice a year usually in May and in November. Once the graduate passes the licensure exam, the nurse takes the formal oath of professional administered by the Professional Regulatory Board of Nursing. The Certificate of Registration signed by the Professional Regulatory Board of Nursing will be issued to the successful examinee which gives the nurse the privilege to practice nursing and to append the initials RN after one's name. The Professional Regulation Commission (PRC) issues the PRC ID which needs to be renewed every three years. At present, continuing professional development credits is not mandatory for renewal of PRC ID. However, the system for mandatory continuing professional development credits for renewal of professional ID is already being prepared.

7.6 Nursing Association

The PRC accredited professional organization of nurses is the Philippine Nursing Association (PNA). There are more than twenty other professional organizations of nurses one of which is the Association of Deans of Philippine Colleges of Nursing (ADPCN). The other associations are composed of nurses of different nursing specialty groups i.e. Critical Care Nurses Association of the Philippines, Operating Room Nurses Association of the Philippines etc.

8. Singapore

8.1 General Information on education

The Ministry of Education directs the formulation and implementation of policies related to education in Singapore. The Singapore Nursing Board (SNB) regulates the standards for the education and preparation of nurses, midwives and Advanced Practice Nurses (APNs) to ensure that graduates are well prepared and competent.

The following are Legislative Acts under the purview of the Ministry of Health. These Acts regulate public health and safety, including the healthcare professions, healthcare practices/establishments as well as statutory boards charged with these responsibilities.

1. Nurses and Midwives Act (Cap 209)
2. Standards for Nursing Education (2011)
3. Code of Ethics and Professional Conduct (1999)

8.2 Student Mobility and Credit Transfer

Credit transfer is possible provided the conditions are met such as:

1. There is an agreement between the universities
2. The courses have similar course outcomes
3. Grade earned is acceptable to the crediting institution
4. Course was taken within a specific time frame
5. For BSN Post Registration- There will be exemptions for the subjects taken in the polytechnics. The extent of advanced standing for diploma holders from a local polytechnic will be reviewed and granted in accordance with NUS rules and regulations.
6. An applicant with a degree from other disciplines can get exemptions or advance standing on a case-by-case basis.

8.3 Quality Assurance and Accreditation

The Singapore Nursing Board accredits and monitors nursing and midwifery programs conducted in Singapore. The standards and criteria for accreditation are defined in the Standards for Nursing Education and Standards for Advanced Practice Nurse Education.

8.4 National Qualifications Framework

Workforce Skills Qualifications (WSQ) (Figure 6) Framework focuses on vocational as opposed to academic education. Under this framework, there are seven (7) levels

With WSQ, Level 5 is for specialists/ graduate diploma/ diploma targeted at professional and specialist's jobs.

Complexity at each WSQ qualifications level is determined by

1. The kind of knowledge and skills involved
2. The kinds of issues or problems that the knowledge and skills are applied to

3. The amount of accountability, independence, self-organisation or organisation of other that is required to solve problems or complete tasks
4. The occupational levels and range and depth of the knowledge and skills required of the jobs which the qualifications relates to. Measures of the *volume* of learning.

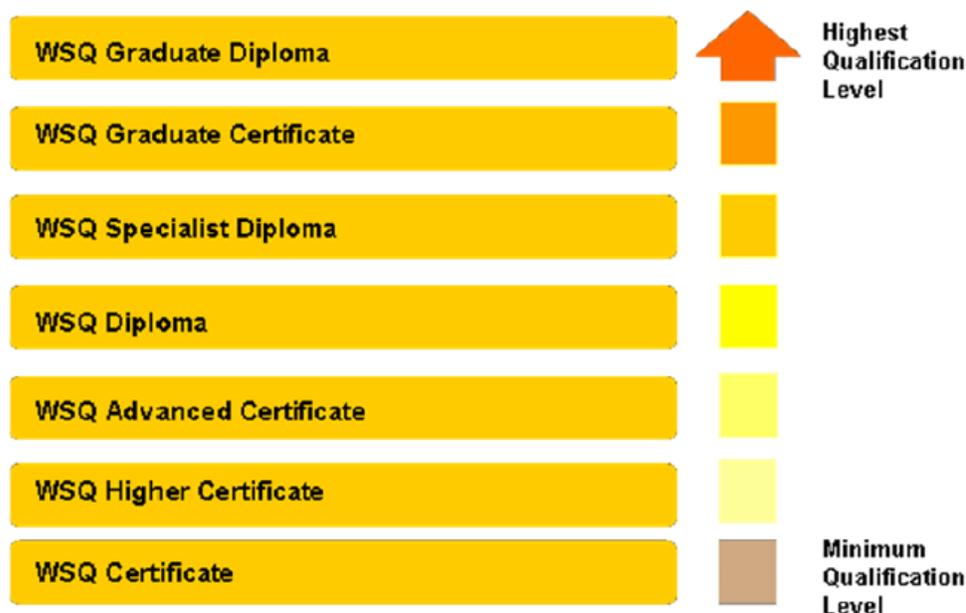


Figure 6
Singapore Workforce Skills Qualification Framework

8.5 Nursing Education and Curricular Structure

The Bachelor Degree is a three (3) to four (4) year program offered at the university.

The curriculum provides a conceptual framework that focuses on the nursing response to healthcare needs of the community in accordance with healthcare policies. Nursing is the primary focus of the program with integration of theory and practice. The clinical practice placements are to facilitate interaction between learners and clients to achieve the stated learning outcomes. There is a minimum of thirty (30) weeks of clinical placement.

The program's learning outcomes and competencies cover the following areas:

1. Safe competent professional and ethical practice;
2. Holistic approach to integration of knowledge, organization and management of care;

3. Effective interpersonal relationships and communication; and
4. Personal leadership and professional development.

There are three types of Bachelor of Science (nursing) Program: a) BSc (Nursing) pre-registration, b) BSc (Nursing) (Honours) and c) Bachelor of Nursing (post registration). The BSc (Nursing) Programme follows the National University of Singapore's modular system. Students usually enrol in 4 modules each semester. Students receive important fundamental knowledge from a range of disciplines including nursing, sciences, and the social sciences. Students also acquire and apply nursing skills in a simulated clinical laboratory on campus. Around 35% of the programme involves learning in a range of clinical practice settings (such as hospitals and community clinics).

High achieving candidates offered a place in the Honours programme will complete a research project and modules on evidence-based nursing, applied research methods and integrated clinical practice

The Bachelor of Nursing (Post-Registration) requires a minimum of 400 curriculum hours of which at least 50% comprises core modules, and the remaining hours for elective modules. The length of time and the credit hours required for programme completion are congruent with the attainment of identified student learning outcomes, national standards and best practices. The duration is between 10 -12 months for a full-time mode and 20-24 months for part-time mode.

To be awarded a Bachelor of Science (Nursing) Degree, students must have:

1. Accumulated a minimum of 120 Modular Credits (MCs) of which 8MCs must be read outside student's Faculty
2. Obtained a Cumulative Average Point (CAP) of not less than 2.00
3. Passed all modules listed in the curriculum
4. Fulfilled the above within a maximum candidature of 4 years unless under extenuating circumstances

8.5.1 Entry Requirements

For the Bachelor in Nursing (Pre-registration)

1. Academic Ability/Subject Requirements

A-Level: a pass at H2 level in any 2 of the following subjects: Biology, Chemistry, Physics, Computing and Maths

NUS High School qualifications: Major CAP of 2.0 in any 2 of the following subjects: Biology, Chemistry, Physics and Maths.

Acceptable Diploma from a Polytechnic in Singapore

2. Language Ability

3. Interview of Candidates

All candidates, local and foreign, who are short-listed, will be asked to attend an interview in April. The selection of students for the BSc (Nursing) programme will be determined by factors over and above the candidates' academic record.

4. Health Status

BSN Post registration Program:

Registered Nurses with valid practising certificate (full and conditional registration only) from the Singapore Nursing Board

8.5.2 Methods of Teaching and Assessment

The teaching strategies include a variety of teaching and learning methods, including: lectures, tutorials, video conferencing, classroom and small group discussions, role-play, simulation-based learning, etc. , use of simulation to facilitate critical thinking, problem-solving and development of clinical skills competence A maximum of 80 hours of simulation learning can be used to replace clinical practice placement hours.

The assessment of learning is based on a variety of strategies that are aligned with the subject area, stage of the educational program and expected learning outcomes. The strategies used measure the integration and application of knowledge, skills and attitude to patient care throughout the program. There is explicit grading criteria for each module/unit.

The institution has an Examination Committee with clearly defined functions, including a grading system based on the modular credit system for academic programs.

8.6 Requirement to Practice Nursing

Upon successful completion of the 3-year or 4-year programme, graduates are eligible to register with the Singapore Nursing Board to practise as a registered nurse.

Practicing Certificate needs to be renewed every year.

8.7 Nursing Association

The Singapore Nurses Association has two types of membership. The full membership is open to all registered nurses and the associate membership is for the enrolled nurses, midwives, dental assistants and paramedics.

9. Thailand

9.1 General Information on education

The Ministry of Education through the Office of the Commission on Higher Education (OHEC) regulates all higher education programs and provides the guidelines for the university curriculum development. It issues related standards and criteria of all level of degrees. All curricula are approved by OHEC.

9.2 Student Mobility and Credit Transfer

All universities use the Thai Qualifications Framework (TQF) as a minimum standard. However, to transfer credits to other university depends largely on each university's regulation and decision.

OHEC has the policy allowing credit transfer both internal (within country HEIs) and external (with HEIs abroad). However, in practice credit transfer is usually a "University to University" agreement.

Committee for Equivalency of Degree of OHEC reviews education taken abroad for possible equivalency to Thai curriculum

9.3 Quality Assurance and Accreditation

Thailand Nursing Council acts as a professional accrediting body. All nursing education institutions must be accredited in order that their graduates can take the national license examination. As of April 2016, there are 85 accredited nursing programs.

There are three organizations involved in the quality assurance and accreditation of nursing and midwifery education programmes.

Internal Quality Assurance System (Institutional Self- Evaluation). The Commission of Higher Education, the Ministry of Education (MoE) gives as guidelines the National Quality Framework (NQF) or Thailand Quality Framework (TQF). The TQF focuses on learning outcomes and the provision of learning experiences to meet learning outcomes as specified.

Revision of curriculum every 5 years is recommended by the MoE. All new and revised curriculum have to meet the TQF standards. The standards are: 1) clarity of goals, objectives and the institution plans; 2) curriculum and instruction; 3) student development; 4) research; 5) community and academic services; 6) cultural conservation; 7) administration; 8) budget and finance; and 9) internal quality assurance system.

The institution provides a Self-Assessment Report (SAR) to the audit team for review; a site visit is performed for confirmation of the report and recommended for further development or quality development. The internal assessment is conducted yearly.

External Quality Assurance and Accreditation. It is conducted by the Office of National Education Standards and Quality Assurance (ONESQA). The institutions are self-identified in to 4 categories; 1) comprehensive university; 2) research university; 3) teaching university; and 4) teaching and community Development University. Seven sets of standards and indicators are measured, analysed and scored every 5 years. Standards set by ONESQA are: 1) quality of graduates; 2) research; 3) services; 4) cultural conservation; 5) institution and staff development; 6) curriculum and instruction; and 7) internal quality assurance system.

After auditing and site visiting, the quality of education is assigned into 3 categories; very good, satisfactory and unsatisfactory. Recommendations for changes and development are given and must be followed by those with unsatisfactory results. The ONESQA reports to the public about the quality of education of the institutions.

Professional Quality Assurance and institution Accreditation. Thailand Nursing and Midwifery Council has regulated nursing education for the country since 1986. Section 30 of the Professional Nursing and Midwifery Act states “to be eligible for the licensing examination, graduates must graduate from an accredited nursing school.”

9.4 National Qualifications Framework

There are six (6) Levels in the Thai Qualifications Framework (Figure 7) for Higher Education:

1. Level 1 Diploma (3 years)
2. Level 2 Bachelor degree
3. Level 3 Graduate Diploma
4. Level 4 Master degree
5. Level 5 Advanced Certificate
6. Level 6 Doctorate Degree

TQF has 5 Domains of Learning Outcomes such as:

1. Moral and Ethics
2. Knowledge
3. Cognitive skills
4. Interpersonal Skills and Responsibility
5. Numerical analysis, communication and information technology skills

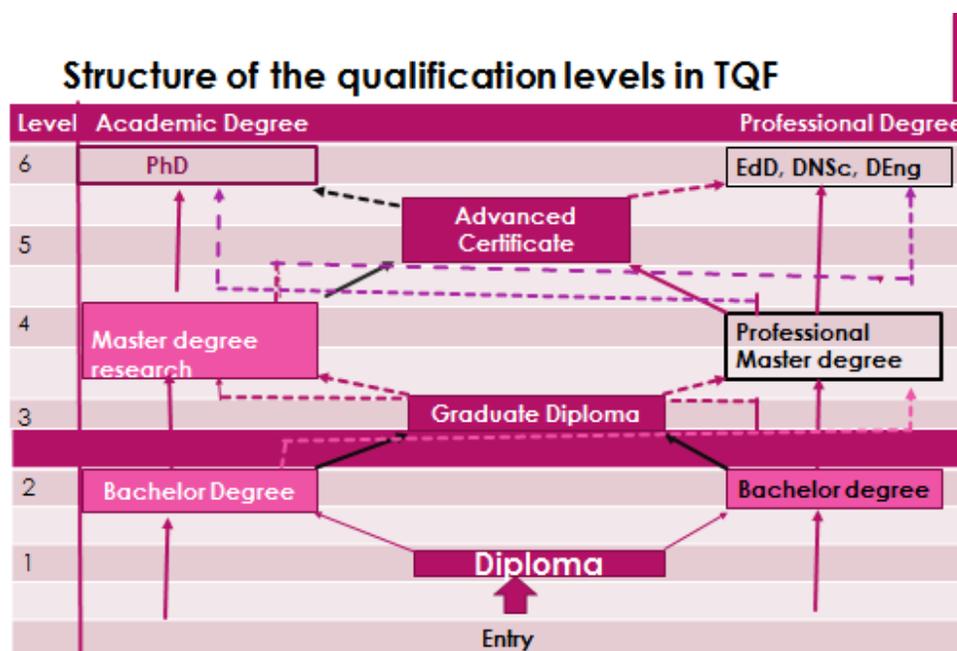


Figure 7
Thailand Structure of the Qualification levels in TQF

9.5 Nursing Education

Nursing education is regulated by four (4) government agencies: Ministry of Education, Ministry of Defense, Ministry of Public Health and Ministry of Interior. The Bureau of Nursing, Ministry of Public Health is the policy making body for nursing practice.

In order to ensure readiness, the new nursing educational institute is required to fulfil the qualifications, resources and readiness of the institution for starting the new program and apply for accreditation 12 months before operating the school and student enrolment. The standards and its criteria for curriculum approval and nursing educational institution accreditation are approved by the Thai Nursing and Midwifery Council (TNMC) Board and published in the Guideline for Curriculum Approval and Institution accreditation for institution and evaluators.

Upon completion of all criteria/ standards, the new nursing institute will be granted accreditation and published in the government gazette. Then the institution can start operating as the nursing educational institute. The accreditation process will then change to on-going nursing school category.

For new nursing program, the Thai Nursing Council does the initial site visit and if the educational institution meets the standards, submits to the Office of the Higher Education Commission (OHEC) the documents- curriculum, faculty, resources, clinical facilities. OHEC looks at the curriculum to check if it meets the minimum requirement. If program is new, the Thai Nursing Council gives initial permit and visits

the school yearly until first cohort graduates. Final approval of academic program is given by the Ministry of Education. Then, the Council visits the educational institution every 5 years.

Currently there are 86 institutions offering Bachelor of Nursing Science (BNS).

9.5.1 Curricular Structure

Bachelor of Nursing Science is a four (4) years program integrated with midwifery. It is competency-based and outcomes-based. The Thai qualifications framework for higher education determines 5 domains of learning outcomes; Moral & Ethic, Knowledge, Cognitive, Responsibility & teamwork, and Numerical skills & ICT.

There are 3 main parts of a nursing curriculum; a minimum of 30 credits are general education courses: 6 credits are in elective courses; 104 credits are in professional courses including pre-clinical courses (anatomy, physiology, pathology, pharmacology etc, and nursing courses). Only obstetric nursing and midwifery require a minimum of 12 credits.

To graduate, one has to have a minimum of 140 credits- 30 credits general education, 6 credits free elective and 194 credits pre-clinical and clinical nursing. 1 credit of a theory course is taught in 1 hour per week (15 weeks per semester), 1 credit laboratory course= 2-3 hours per week, Nursing practicum = 4 hours per credit hour.

9.5.2 Entry Requirement

For direct entry, high school graduate certificate (12 years) is required.

9.5.3 Methods of Teaching and Methods of Assessment

A variety of teaching and learning methods are used, such as lecture, small group discussion, project, problem based learning, case study etc. The Discipline Standard of Bachelor of Nursing Science requires to use student centred strategy in teaching and learning. Lecture is still a main method of teaching and learning although less than before.

Assessment methods are based on domains of learning outcomes.

9.6. Requirement to Practice Nursing

The Thai Nursing and Midwifery Council is composed of sixteen members who are appointed by the Ministry concerned and sixteen are elected by the nurses.

Only those who graduate from accredited programs can take the national nursing examination.

Once the graduates pass the national exam for nurses, the license is given by the Thai Nursing and Midwifery Council which is good for 5 years. For renewal of license, there is a need for 50 unit hours of continuing education.

If the graduate is from a foreign nursing school, evaluation of the transcript of records is done by the Thai Nursing and Midwifery Council. If without Midwifery integrated in the curriculum, the nurse can take only the nursing portion. Or the nurse may take the midwifery courses and then take both the nursing and midwifery portions.

9.7 Nursing Association

The Thailand and Midwifery Council is the organization to which registered nurses and midwives are members of.

10. Vietnam

10.1 General Information on education

The Ministry of Education and Training (MOET) is the government agency responsible for education in Vietnam. Autonomous universities can offer program without initial approval of MOET as long as they follow the standards set. Schools of nursing and medicine are also under the supervision of the Ministry of Health.

There are three (3) different types of nursing program. There are twenty four (24) schools offering the bachelor's degree program, 62 schools offering the three (3) year diploma program and 128 schools offering the two (2) year associate nursing program. There are twenty four (24) bachelor of nursing programs 8 of which are private schools.

By 2021 the country will no longer recruit for the 2 year program of nursing

As of 2015, only 15% are Bachelor degree graduates; 15% are secondary nurse/ diploma program graduates and majority (70%) are associate certificate graduates.

As of April 2016, there is no law regulating the practice of nursing but there is a general law that covers all health professions, the Law of Treatment and Consultation.

10.2 Student Mobility and Credit Transfer

Internal mobility is allowed and there is accreditation of prior learning. Nurses who graduated from the two (2) year program can take the Bridge program for the bachelor degree and all the courses taken in the diploma program are credited.

With the curriculum structured by credits and not by semester, crediting of courses taken within country can be recognized easier. Credits are recognized if there is substantial equivalency.

While students can move from one school to other inside country, in reality it is not common due to the difference of entrance score established by each school.

External mobility is only possible if there is a government-to-government agreement.

10.3 Quality Assurance and Accreditation

The legal basis for quality assurance and accreditation of institutions of higher learning is the Law of Higher Education (08/2012/QH13) Chapter VII: Higher Education Quality Assurance and Accreditation with specific provisions on the following

Article 49. Objectives, rules and subjects.

Article 50. Duties and authority of higher education institutions in higher education quality assurance

Article 51. Duties and authority of higher education institutions in higher education accreditation

Article 52. Education accreditation body

Article 53. Using the higher education quality assessment results.

Accreditation of programs was started only in 2007. Internal accreditation is done by the university itself. Schools need to establish quality assurance unit and implement the quality assurance activities in the school. The self-assessment report is submitted to MoET. Internal accreditation is compulsory.

External accreditation is only voluntary. MOET has established in 2013 four (4) national accrediting bodies as the external accrediting centers all over the country. These four centers are: Hanoi National University, Ho Chi Minh National University, Danang University and Association of Higher Education Institutions. Following the circular, all higher education institutes have to be accredited before 2016. But as of April 2016, there are only about 50 institutes of higher education accredited. There is no nursing school accredited so far. Schools have only done self-survey and have submitted the report to the MOET. The system for accreditation is not yet complete. Training of accreditors is on-going.

MoET created the criteria for external accreditation in collaboration with the Ministry of Health and the Vietnam Nurses Association. External accreditation is good for 5 years.

10.4 National Qualifications Framework

There is no approved National Qualifications Framework. It is still under construction.

10.5 Nursing Education and Curricular Structure

The nursing program has 75% core curriculum which must be used in all the nursing programs and 25% can be freely added by the educational institution. The bachelor program has a total of 202 credits and is completed in four (4) years. The diploma program (secondary nurse) has 160 credits.

One credit is equal to fifteen (15) hours for theory courses. The clinical practicum starts at year II but is not given any credit. The student rotates in all the areas of the hospital in all the three (3) shifts.

In the Vietnamese University System, one credit is equated to fifteen (15) hours of classroom instruction; 30-45 hours of practical training and 45-60 hours of research and thesis writing. This is the system outlined by the Ministry of Education and Training. However, some institutions of higher education use their own credit system.

All graduates of nursing program from all the three program types are required to have nine (9) months of clinical practicum under supervision by a licensed nurse before they can apply for a license to practice at the Bureau of Health in each province or the Ministry of Health for those facilities under the MOH.

Hanoi Medical University has a pilot program funded by MOET called Advanced Program in Nursing. It is a 4.5 years program offered in collaboration with University of California in Long Beach. The program is taught in English. Its first batch of graduates was in 2015 and many of the graduates are already working abroad.

10.5.1 Entry Requirement

For enrolment to the nursing program, students have to pass the national examination which is usually given every July on subjects such as biology, mathematic and chemistry. Twelve (12) years of general/ basic education is required for admission.

10.5.2 Methods of Teaching and Methods of Assessment of Learning

Many courses in the nursing program are taught by physicians. If a nurse is teaching in the university, a master's degree is required but license as a professional nurse is not mandatory.

Assessment methods are written examinations in the form of essay and multiple choice questions. Practical examination is done in the form of skills test using the Multiple Stations Practice Examination (MSPI). In the clinical area, students are required to make care plans for specific patients.

10.6 Requirements to Practice Nursing

At present, there is no nursing council or regulatory body for nursing. Registration of nurses will only start in 2017. Registration and licensing have the same meaning. License given is lifetime. Twenty four (24) hours per year of continuing education credits is required and the head of office monitors the compliance of the nurse. The Vietnam Nurses Association is recognized by the Ministry of Health as a provider of continuing professional education.

If a foreign health professional wants to practice in Vietnam, they need to take the Vietnamese language examination.

10.7 Nursing Association

There is an association of nurses, the Vietnam Nurses Association and membership is voluntary. There is an association of deans of health sciences schools but not specific to deans of nursing program.

SIMILARITIES and VARIATIONS in NURSING PROFESSIONAL EDUCATION

1. Types of Nursing Programmes

There are only two countries with a single nursing program- Thailand and Philippines. The other eight countries have several programmes which are below the bachelor degree. But in these eight countries there is an effort to move up their nurses without bachelor degree by offering the “Bridging Program”. The bridge program duration varies from 2-3 years with some countries requiring work experience before entry to the bachelors program. The types and Length of nursing programs is summarized in Table 4 below.

Table 4 Types and Length of Nursing Programs

Country	Types of Nursing Programs	Duration
Brunei	Bachelor degree	4 years
	Diploma program	3 years
Cambodia	International Program in Nursing Degree	3 years after Foundation year
	Bridging Program in Nursing Degree	2 years after diploma program
	Bachelor in Nursing Science	4 years
Indonesia	Bachelor of Science in Nursing	5 years
	Diploma program	3 years
Lao PDR	Bachelor of Nursing Science (BNS) direct entry	4 years
	Bachelor of Nursing Science (continuing education)	2.5 years after diploma
Malaysia	Bachelor Program (pre-registration)	4 years
	Diploma Program	3 years
Myanmar	Direct entry generic program	4 years
	Bridge Program	2 years
Philippines	Bachelor of science in Nursing	4 years
Singapore	BSc (Nursing) Program	3-4 years
	BSc (Nursing) (Honours) Program	5 years

Thailand	Bachelor of Science in Nursing (Academic)	4 years
	Bachelor of Science in Nursing (Professional)	5 years
Vietnam	Bachelor of Science in Nursing	4 years
	Diploma Program	3 years
	Associate Nursing program	2 years

2. Entry Requirements

All the countries require the interested applicants to enter nursing education to be high school graduates. However, in two countries, basic education including secondary level is less than 12 years- Myanmar (11 years) and Philippines (10years until 2017; by 2018 basic education will be 12 years) (Table 5).

In several countries, there are academic requirements before entry to the nursing program such as grades in Biology, Chemistry, Physics and Mathematics. In three countries where the medium of instruction in the basic education is not English while at the tertiary level English is used, passing an English proficiency test is required. In Cambodia, if the student will enter the international nursing program, passing an English test is required.

For entry to the bridge program/ post-registration bachelors program, work experience is required.

Table 5 Entry Requirements for Bachelor Nursing Program

Country	Entry Requirements
Brunei	Credit 6 in English Language at GCE/ TOEFL-550/ IELTS- 6 “A” level qualification in Biology, Chemistry Math or Physics Multiple mini-interviews High school graduate Grade 12
Cambodia	High school diploma Pass national entrance exam English test score at least level 5 for the international program
Indonesia	High school grade 12
Lao PDR	Graduate of Upper Secondary education (Grade 12) Pass national exam on Mathematics, Biology, Chemistry and Lao culture
Malaysia	Obtained at least a “B” at Sijil Tinggi Persekolahan in the subjects Biology, Chemistry, Physics (Secondary year 6) Obtained at least Grade 6C at Sijil Pelajaran Malaysia level in Mathematics or additional Mathematics subjects (secondary year 5) English score of at least 515 TOEFL or 6,0 in IELTS
Myanmar	Direct entry to the Bachelor program – completion of Standard 11 th Grade

	Pass entrance exam The bridge program is open to government nurses holding diploma for nursing certificate with two (2) years services.
Philippines	High school graduate Grade 10 until 2018 High School graduate Grade 12 by SY 2018-19
Singapore	Academic ability/ subject requirements- satisfy pre-requisite subjects (Biology, Chemistry, Physics, Computing and Mathematics) Language ability- University Administered Qualifying English Test Pass interview Medical status For post registration program bridge program- Registered Nurses with valid practising certificate (full and conditional registration only) from the Singapore Nursing Board
Thailand	Direct entry high school graduate certificate (12 years)
Vietnam	Pass National Exam on Biology, Mathematics , Chemistry High School graduate- 12 years of general/ basic education

3. Course Credits Structure

The structure and course credits given to the different courses in the nursing curriculum including clinical practicum differ widely as shown in Table 6. The number of hours given to one credit is varied. This is an area that needs to be studied further to see how equivalencies can be done to harmonize curriculum structure and facilitate academic mobility of students.

Table 6 Course Credit Structure of Nursing Program

Country	Course Credit Structure
Brunei	1 module credit (lecture)= 4 contact hours X 14 weeks 1 module credit (clinical)= total workload 8-10 hours per week X 14 weeks
Cambodia	No data
Indonesia	1 credit (theory) = 16 hours 1 credit (clinical)= 64 hours (4 hours X 16 weeks)
Lao PDR	1 credit= 1 hour lecture/ theory 1 credit= 2 hours demonstration or skills laboratory 1 credit= 4 hours practicum or clinical placement
Malaysia	1 credit= 40 notional hours 1 credit= 2 weeks practicum/ clinical (42 hours per week)
Myanmar	No data
Philippines	1 credit (theory)= 54 hours 1 credit (RLE)= 51 hours
Thailand	1 credit (theory)= 1 hour per week X 15 weeks 1 credit (laboratory course)= 2-3 hours per week

	1 credit= 4-6 hours practicum/ clinical placement
Singapore	Uses modular system, 1 modular credit = 2.5 hours of study and preparation per week Around 35% of the programme involves learning in a range of clinical practice settings (such as hospitals and community clinics).
Vietnam	1 credit (theory)= 15 hours 1 credit (practical training)= 30-45 hours 1 credit (research and thesis writing)= 45-60 hours No credit for clinical practicum

4. Curricular Structure

Curricular structure is another area that need further study on how to harmonize the curriculum. The total credits needed to complete the bachelor program ranges from 102 -202. This wide variation can be attributed partly to the variations in the course credit system of the different schools/universities offering the bachelor program.

A positive factor that can be said about the different curricula is that all of the countries stated that their program is competency-based and clinical practicum is included in the curriculum, whether integrated from the first year or as a form of internship after the academic phase. With the AJCCN having formulated the core competencies of a professional nurse (bachelor degree graduate), there is a possibility that harmonization of the curriculum can be done by focusing on the core competencies and the corresponding set of indicators given by AJCCN. The nursing curricular structure of the 10 member countries is presented in Table 7.

Table 7 Nursing Curricular Structure

Country	Curriculum Structure
Brunei	4 year program 50% theoretical study; 50% clinical practice placement Total credits= 150 modular credits
Cambodia	BNS total credits= 110 credits Total hours= 3,285 (theory= 1,292 hours & practice=1993) Completed in 6 semesters after 1 year Foundation year (30credits/ 510 hours)
Indonesia	5 year competency-based program (4+1) Total credits (academic phase)= 144 credits After academic phase, professional phase= 1 year internship (36 credits) After professional phase, can sit for the national competency exam
Lao PDR	Curriculum is competency-based Bachelor program= 142 credits
Malaysia	Pre-registration nursing bachelor curriculum is outcomes- based 4 year program or 8 semesters full time 45-55% theory and practical credit hours for nursing sciences component 45-55% clinical practice placement
Myanmar	Bachelor degree program has been changed from 3 years to 4 years to harmonize with ASEAN requirement for bachelor degree Direct entry generic course= 4 years Bridge program= 2 years (open to government nurses holding diploma or nursing certificate with 2 years services)
Philippines	BSN Program is 4.0-4.5 years, Curriculum is outcomes-based and competency-based Integrated theory and practice Total credits= 202 (87 GE & 115 professional courses) Total RLE hours= 2,346
Singapore	BSc (Nursing) Program follows the NUS modular system 3-4 year program offered at the university Bachelor's Degree- 3-4 years (Honours) Around 35% of the programme involves learning in a range of clinical practice settings (such as hospitals and community clinics). The curriculum provides evidence of: (i) a conceptual framework; (ii) a focus on the nursing response to healthcare needs of the community in accordance with healthcare policies

Thailand	BSN is 4 year program Curriculum is competency-based and outcomes based To graduate, one has to complete at least 140 credits 3 main parts: minimum 30 credits GE courses; 6 credits elective; 104 credits for professional courses
Vietnam	Bachelor program has 202 credits completed in 4 years After completion of program, mandatory 9 months supervised practicum

5. Methods of Teaching and Methods of Assessment of Learning

All the countries included in this study used varied methods of teaching and methods of assessing the learning outcomes. It is noteworthy to mention that the respondents stated that in choosing the methods of teaching and methods of assessment of learning, the guiding principle followed is that the method must match the learning objectives of the course. In the more economically advanced countries like Singapore, Malaysia and Thailand, simulation of cases is used to facilitate learning the skills in providing care of patients with complex conditions in a safe learning environment (skills laboratory).

Clinical practicum is evaluated using mainly the observation of student's performance using OSCE in the skills laboratory and the involvement of the clinical preceptor in evaluating the students' competencies in the clinical area.

6. Credit Transfer System and Academic Student Mobility

All the respondents said that internal mobility is possible although with some limitations and conditions that apply.

Brunei has functioning academic student mobility mechanism with their international partners.

Maximum number of course credits accepted by the universities/schools varies from 30%-50% of the courses taken in another university/ program within country which are part of the curriculum to be taken or being applied for. All countries have mechanism for recognizing prior learning (RPL) but the system varies from university to university and country to country.

Malaysia, Philippines and Thailand have policy for limited external credit transfer for their own students mainly facilitated by university-to-university agreement through memorandum of understanding/agreement.

Indonesia utilizes ASEAN International Mobility for Students (AIMES) in evaluating courses taken outside the country. The Philippines endorses the UMAP Credit transfer System in evaluating courses taken by students participating in student exchange program among member universities. (Table 8)

Table 8 Credit Transfer System Used

Country	Credit Transfer System
Brunei	Universiti Brunei Darussalam (UBD) creates opportunities for fruitful collaborations between UBD and its international partners for academic and student mobility through exchange programmes and fellowship
Cambodia	For the transfer credit (from outside the country), not being done it yet, but students who finished foundation year can transfer from their University to UHS.
Indonesia	<p>Private universities allow transfer of credits taken in another university based on learning outcomes.</p> <p>Student mobility among public/state universities is affected by level of accreditation of the program, i.e. if the program is Level- Very Good (B) the student cannot transfer to a Level Excellent (A) nursing program and grades obtained in the courses taken.</p> <p>Only 50% of courses obtained from outside the university (within Indonesia) can be credited.</p> <p>The Ministry of Research, Technology and Higher Education accredits the study abroad program. Actual crediting is based on the learning outcomes and is done by the university concerned. Only 75% of semestral credits are accepted from an international program.</p> <p>For credit transfer for ASEAN countries, the Ministry of Research, Technology and Higher Education follows the ASEAN International Mobility for Students (AIMES). Credit transfer/ student mobility is allowed provided there is a Memorandum of Agreement (MOA) between the two HEIs “university to university agreement”.</p>
Lao PDR	<p>There is credit transfer system for within country courses taken. For example, courses taken in the diploma program are credited towards the BNS(continuing education program) so that the nurse need only 2.5 years to earn the bachelor degree.</p> <p>No system yet for courses taken outside of the country.</p>
Malaysia	Credit transfer as much as 30% of courses taken either diploma or bachelor program from private or public schools in Malaysia is allowed.

	<p>Some universities accept foreign students to enrol under their University Student Mobility Program for one semester to one year.</p> <p>Individual universities have their own policy for crediting of courses.</p> <p>Mobility for international nursing experiences of Malaysian students are allowed but no transfer credit given.</p>
Myanmar	Currently there is no credit transfer system in place.
Philippines	<p>With the passage of RA10647 known as the Ladderized Education Act of 2014, prior learning and credit transfer mechanisms are clearly stipulated. Credits earned from different modalities are credited by institutions (Sec. 3 c).</p> <p>Equivalencies and pathways are defined to allow people to move easily and readily between different education and training sectors and between these sectors and the labor market ETEAP.</p> <p>CHED CMO No. 33 series 2013 on Policies and Guidelines for the use of UMAP ACTS for credit transfer system</p>
Singapore	<p>Credit transfer is possible provided the conditions are met such as:</p> <p>There is an agreement between the universities</p> <p>The courses have similar course outcomes</p> <p>Grade earned is acceptable to the crediting institution</p> <p>Course was taken within a specific time frame</p>
Thailand	<p>All universities use the Thai Qualifications Framework (TQF) as a minimum standard. However, to transfer credits to other university depends largely on each university's regulation and decision.</p> <p>OHEC has the policy allowing credit transfer both internal (within country HEIs) and external (with HEIs abroad). However, in practice credit transfer is usually a "University to University" agreement.</p>
Vietnam	<p>Internal mobility is allowed and there is accreditation of prior learning. Nurses who graduated from the two (2) year program can take the Bridge program for the bachelor degree and all the courses taken in the diploma program are credited.</p> <p>External mobility is only possible if there is a government-to-government agreement</p>

7. Quality Assurance and Accreditation

All countries reported internal quality assurance mechanism done by the concerned university/school and oversight/ regulatory monitoring is done either by the Ministry of Education or the Ministry of Health or by both (Table 9). Two countries still do not have external accrediting bodies although they reported that there is a plan to do so in the near future.

Four countries have well designed mechanism whether voluntary or mandatory with an independent non-government agency or mandatory with a government agency. A detailed discussion of three existing country models is in another section of this report.

Table 9 Quality Assurance system and Accreditation

Country	Quality Assurance System
Brunei	Higher education is under the supervision of the Ministry of Education. External accreditation of programs in higher education is done by the Brunei Darussalam National accreditation Council.
Cambodia	Ministry of Health provides oversight for Government Supported School of Nursing Ministry of Education for Private School of Nursing. No external accrediting agency
Indonesia	Indonesian Accreditation Agency for Higher Education in Health (IAAHEH) or in Indonesian, the LAM-PTKES, accredits programs for higher education specifically for the health professions. BAN-PT accredits institutions of higher education
Lao PDR	Educational Development Centre, government body established in 2011 as part of the University of Health Sciences to improve the quality of health professional development through improvements in training curricula, teaching skills, educational resources, materials and the educational facilities. No external accrediting body for the nursing program
Malaysia	External accreditation of higher education is done by Malaysian Qualifications Agency. For professional programs it is done jointly by the technical accreditation committee composed of representatives of Malaysian Qualifications Agency, MOHE and Nursing Board of Malaysia (NBM) For nursing, the professional body to regulate nursing profession through licensing of the nurses is the Nursing Board of Malaysia. Nursing program must be accredited before students can graduate and sit for the Nursing Board of Malaysia exam.

	The nursing program must have full accreditation to obtain recognition from the Nursing Board of Malaysia (NBM).
Myanmar	<p>National Education Law of 2014 created National Education Commission which was mandated to form an independent Higher Education Cooperation Committee to regulate matters related to higher education</p> <p>An independent National Education Standard and Quality Assurance Committee carries out the work of external quality assurance</p>
Philippines	<p>Internal quality assurance- approval of program by university council following Policies, Standards and Guidelines (PSG) of CHED for nursing program and university's policies and vision-mission-values</p> <p>External accreditation- a new program is granted PERMIT status by Commission on Higher Education (CHED)</p> <p>Before the first cohort of students graduate, CHED-Technical Committee for Nursing Education do a site visit and document review before granting Government RECOGNITION status</p> <p>Only graduates of nursing program with government recognition can sit for the National Licensure Examination for Nursing</p> <p>External accreditation is voluntary done by 2 non-governmental independent accrediting federation/ networks- Federation of Accrediting Agencies of the Philippines (FAAP) & National Network of Quality Accrediting Agencies (NNQAA)</p> <p>There are four levels of accreditation with Level 4 as the highest.</p>
Singapore	<p>Singapore Nursing Board accredits and monitors nursing and midwifery programs</p> <p>Standards and criteria for accreditation are defined in the Standards for Nursing Education and Standards for Advanced Practice Nurse Education.</p>
Thailand	<p>Thailand Nursing Council acts as a professional accrediting body. All nursing education institutions must be accredited before their graduates can take the national license examination.</p> <p>Internal Quality Assurance System (Institutional Self-Evaluation) The Commission of Higher Education of the Ministry of Education (MoE) gives as guidelines the National Quality framework (NQF) or Thailand Quality Framework (TQF)</p> <p>External Quality Assurance and Accreditation by the Office of National Education Standards and Quality Assurance (ONESQA)</p>

	Professional Quality Assurance and institution Accreditation by Thailand Nursing and Midwifery Council has regulated nursing education for the country since 1986.
Vietnam	<p>Accreditation of programs started 2007</p> <p>Internal accreditation is done by the university itself.</p> <p>External accreditation is only voluntary. MOET established in 2013 four (4) national accrediting bodies as the external accrediting centers all over the country. These four centers are: Hanoi National University, Ho Chi Minh National University, Danang University and Association of Higher Education Institutions.</p> <p>MoET created the criteria for external accreditation in collaboration with the Ministry of Health and the Vietnam Nurses Association.</p>

8. Registration and Licensing of Nurses

As far as requirement to practice the nursing profession after completing the education for bachelor degree program, there is a wide variation in the system employed (Table 10). In three (3) countries, there is no national licensure examination required only registration with the regulatory body.

There are two (2) countries requiring all three (3) common requirements such as passing the national licensure examination, registration with a government body and securing a license to practice.

There are two countries with national licensure examination and require registration with a government regulatory agency but no license needed to be issued to be allowed to practice.

One country requires passing the licensure national examination and securing a license to practice; one (1) requires only passing the national competency examination, and one country has no requirement to practice the nursing profession except graduation from the nursing education program.

Table 10 Requirement for Nursing Practice

Country	Requirement for Nursing Practice
Brunei	<p>There is no national licensure examination required</p> <p>Nurse needs is to register with the Brunei Nursing Council</p> <p>The license is renewed annually.</p>
Cambodia	<p>Currently, no nursing law and nursing regulation.</p> <p>Nurse needs to pass the National Exit exam after graduation given by the Ministry of Health which started in 2012</p>
Indonesia	<p>After passing the national competency test, the nurse register with MTKI since the Council of Nursing is still under development.</p> <p>Registration is different from license. If a nurse wants to practice nursing, s/he must first register, then get a license to practice from the province s/he intends to practice.</p> <p>Renewal of license is every five (5) years with required 25 credits Continuing Professional Development (CPD)</p> <p>Component of CPD: professional practice (10-20%), community service (0-20%), education/ training (40-80% and science development (0-20%).</p>
Lao PDR	<p>Registration of health professionals with Department of Health Care, Ministry of Health.</p> <p>Health staff members in the public health facilities are recruited as civil servants and practice without need for license.</p> <p>Healthcare professional licensing strategy has been approved and giving of licensure examination for nurses is planned to be the next step.</p>
Malaysia	<p>Upon successful completion of the programme, the students are eligible (both bachelor degree and diploma graduate) to sit for the Nursing Board of Malaysia (NBM) Examination to be licensed to practice as a Registered Nurse.</p> <p>Upon passing the NBM examination, the nurse registers with the Nursing Board of Malaysia.</p> <p>Renewal of practicing certificate is done annually.</p> <p>Temporary Practicing Certificate (TPC) is issued to foreign trained nurses who wish to seek employment in Malaysia provided they fulfil the criteria required by the Nursing Board of Malaysia.</p>
Myanmar	<p>After completing the nursing program, the graduate needs to pass the board examination. The board examination is given by the Myanmar Nurse and Midwife Council.</p>

	<p>After passing the examination, register with Nurse and Midwife Council.</p> <p>Any registered nurse who wishes to get a license to practice must apply to the respective Supervisory body of the Ministry of Health.</p> <p>Renewal for local nurses is stipulated to be every two (2) years but this process is not yet implemented, awaiting approval for full implementation</p>
Philippines	<p>The BSN graduate need to pass the National Licensure for Nurses; only graduates of government recognized nursing programs can sit for the exam</p> <p>After passing, the nurse takes the formal oath of professional administered by the Professional Regulatory Board of Nursing.</p> <p>Certificate of Registration signed by the Professional Regulatory Board of Nursing is issued to successful examinee which gives the nurse the privilege to practice nursing and to append the initials RN after one's name.</p> <p>Registration is lifetime unless revoked or suspended.</p> <p>The Professional Regulation Commission issues the PRC ID which needs to be renewed every three years.</p>
Singapore	<p>Upon successful completion of the 3-year or 4-year programme, graduates are eligible to register with the Singapore Nursing Board to practise as a registered nurse.</p> <p>Practicing Certificate needs to be renewed every year</p>
Thailand	<p>Only graduates from accredited programs can take the national nursing examination.</p> <p>After passing the national exam for nurses, license is given by Thai Nursing and Midwifery Council which is good for 5 years.</p> <p>For renewal of license, there is a need for 50 unit hours of continuing education.</p> <p>If the graduate is from a foreign nursing school, evaluation of the transcript of records is done by the Thai Nursing and Midwifery Council. If <u>without</u> Midwifery integrated in the curriculum, the nurse can take only the nursing portion.</p> <p>Or, the nurse may take the midwifery courses needed to qualify to take both nursing and midwifery portions.</p>
Vietnam	<p>At present, there is no nursing council or regulatory body for nursing. Registration of nurses will only start in 2017. Registration and licensing have the same meaning.</p>

9. National Qualifications Frameworks (NQF)

In all but two of the countries studied, the bachelor's degree program graduate is categorized as NQF Level 6 (Table 11) (Figure 8). Thailand utilizes a different levelling which is exclusive to higher education and categorizes the bachelor degree as TQF Level 2 in the TQF of six levels.

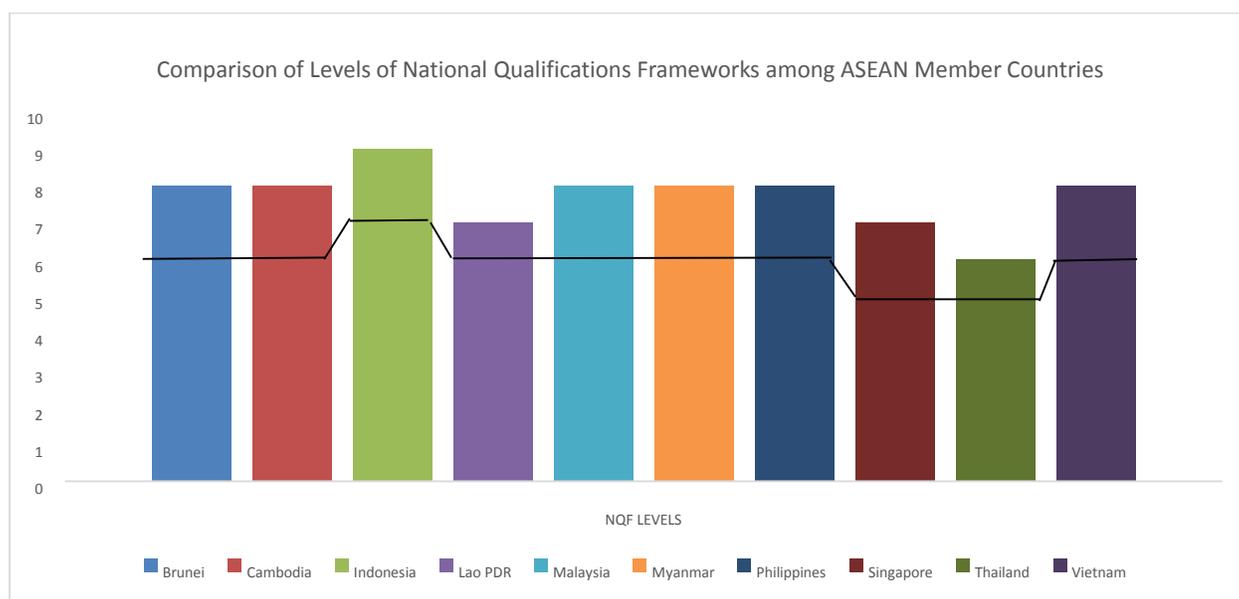
The Singapore National Qualifications Framework (SNQF) referred to as the Academic System has ten (10) levels. A bachelor degree graduate is categorized as SNQF Level 7. Singapore has recently developed the Workforce Skills Qualifications (WSQ) Framework which is a product of major recent reforms to Singapore's Continuing Education and Training (CET) system. WSQ system focuses on vocational as opposed to academic education. Under this framework, there are seven (7) levels with WSQ fifth (5th) level being targeted for specialists/ graduate diploma/ diploma in the professional and specialists jobs.

Table 11. Level of Bachelor Degree in National Qualifications Frameworks among ASEAN Member Countries

COUNTRY	National Qualifications Framework (NQF)	
	Number of Levels	Level Assigned to Bachelor Degree Graduate (Nursing)
Brunei	BQF 8	BQF 6 A systematic, research-based, coherent, introduction to the knowledge, ideas, principles, concepts, and basic research methods and to the analytical and problem-solving techniques of a recognized major subject or subjects.
Cambodia	CQF 8 Cambodia Qualifications Framework (CNQF) comprising eight levels was approved by Prime Minister in 2014 in the form of Sub-Decree No. 153 of 28-March-2014 on National Qualification Framework of Cambodia (NQFC). It started to be enforced only in in 2015. Learning outcomes in each level are measured based on 5 domains: 1.Knowledge; 2.Cognitive skills; 3.Interpersonal skills and responsibility 4.communication, Information Technology and numerical skills; 5.Psychomotor skills (for technical and vocational)	CQF 6

Indonesia	<p style="text-align: center;">IQF 9</p> <p>IQF descriptors consist of two (2) parts:</p> <p>1) <u>general description</u> describing characteristics, personalities, working attitude, ethics, morality of every Indonesian human being and applied to every level;</p> <p>2) <u>specific description</u> describing science, knowledge, know-how, skills, and competencies mastered by a person depending on his level.</p> <p>The specific descriptors comprises of four main elements: (a) skills in fulfilling the job and competence, (b) coverage of science and/or knowledge, (c) methods and levels of competence in applying science/ knowledge, and (c) management skills.</p>	<p style="text-align: center;">IQF 7 Professional</p> <p>IQF Level 6 is for the Academic Phase Nursing Program (BSN 4 years). After completing the one (1) year internship, the nurse completes the Ners Program (4Years + 1) and is considered IQF Level 7.</p>
Lao PDR	<p>Draft Lao PDR National Qualifications Framework (LNQF) developed and awaiting approval</p> <p>Draft has 7 Levels</p> <p>LNQF have 4 domains: knowledge, skills, application, social skills.</p> <p>To implement the NQF, the Ministry of Education and Sport and the Ministry of Labour and Social welfare, in close coordination with international organizations and donors, e.g. ILO, ADB, German Development Cooperation, etc, are in the stage of creating instruments and classifying qualifications according to a set of criteria for levels of learning outcomes.</p>	Proposed for bachelor degree – LNQF Level 6
Malaysia	<p>MQF 8 Levels</p> <p>Qualification levels indicate levels of expected capabilities described with generic features in terms of:</p> <p>Depth, complexity and comprehension of knowledge</p> <p>Application of knowledge and skills</p> <p>Degree of autonomy and creativity in decision making</p> <p>Communication skills</p>	Bachelor degree graduate is Level 6 Malaysian Qualifications Framework (MQF)

	Breadth and sophistication of practice	
Myanmar	The National Qualifications Framework was started to be developed in 2013 and the proposal has eight levels. Will initiate its referencing work by 2017.	As of February 2015, in the draft NQF, the bachelor degree graduate is categorized as Level 6
Philippines	Philippine Qualifications Framework (PQF) has 8 Levels PQF has 3 domains-: Knowledge, skills and values Application Degree of independence	Professional with a bachelor degree like BSN is PQF Level 6. Knowledge, skills and values- demonstrate broad and coherent knowledge and skills in their field of study for professional work and lifelong learning Application- application in professional work in a broad range of discipline and/ or for further study Degree of independence- substantial degree of independence and or in teams of related fields with minimal supervision
Singapore	Workforce Skills Qualifications (WSQ) Framework focuses on vocational as opposed to academic education. Under this framework, there are seven (7) levels	In the WSQ, Level 5 is for specialists/ graduate diploma/ diploma targeted at professional and specialists jobs.
Thailand	Thailand National Qualifications Framework has TNQF 9 Levels including basic education Thailand has six (6) levels for higher education (after completion of basic education) Descriptors have 5 domains: Ethical and moral development Knowledge Cognitive skills Interpersonal skills and responsibility Analytical and communication skills	TNQF Level 5 bachelor degree Bachelor of Nursing Science (BNS) is considered Level 2 TQF for Higher Education.
Vietnam	According to the officials of MOET, the draft National Qualifications Framework has already been developed and is awaiting the approval by the higher government officials. The draft VQF has eight (8) Levels	The bachelor degree is proposed to be Level 6



Legend: ----- Bachelor's degree level
 Proposed NQF level – Lao PDR, Myanmar and Vietnam

Figure 8
Comparison of Levels of National Qualifications Framework
among ASEAN Member Countries

MODELS of QUALITY ASSURANCE through ACCREDITATION

1. The Indonesian Model: Mandatory Accreditation with Specific Accrediting body for Health Professions Education

Higher Education in Indonesia is under the Ministry of Research, Technology and Higher Education. The Higher Education Act Number 12 year 2012 is aimed at a) providing universities with greater power and autonomy over their management, curriculum and use of resources; b) promoting internationalization of education and c) encouraging the entrance of foreign universities.

1.1 Quality Assurance through Accreditation

Accreditation in higher education is mandatory. There are two external accreditation processes being implemented for higher education of health professions. To accredit the education institutions, an independent body responsible for accreditation is the Indonesian National Accreditation Agency for Higher Education (NAA-HE) or in Indonesian known as BAN-PT of the Ministry of National Education established in 1994. It is fully funded by the government. All accreditation processes are also fully funded by the government.

To accredit specifically health professions educational programs, an independent body, the Indonesian Accreditation Agency for Higher Education in Health (IAAHEH) or in Indonesian Lembaga Akreditasi Mandiri Pendidikan Tinggi Kesehatan (LAM-PTKes) was created. The development of LAM-PTKes was facilitated by Health Professional Education Quality (HPEQ) Project of the Director General for Higher Education of the Ministry of Education since 2009 which launched reforms in higher education in health. The founders of IAAHEH are the seven (7) health professions organizations and seven (7) associations of health education institutions from Medicine, Dentistry, Nursing, Midwifery, Pharmacy, Nutrition and Public Health.

BAN-PT introduced in 2008 a new QA-system which modified the fourteen criteria (14) to just seven (7) criteria/standards. These seven are: (1) Vision, Mission, Objectives and Strategy, (2) Governance, Leadership, Management and, Quality Assurance System, (3) Students (including students affairs) and Graduates, (4) Human resources Management (Faculty and staff members), (5) Curriculum, Learning Approach and processes , and Academic Atmosphere, (6) finance, facilities and infrastructures, and Information/ICT Management, (7) Research, community services and collaborations. Accreditation cycle is every five (5) years.

IAAHEH (LAM-PTKES) accredits study programs of health education professions while BAN-PT accredits the institutions of higher education (HEIs). The business process for accreditation is shown in Figure 9 and Table 12. Only graduates of accredited study programs by IAAHEH can take the competency-based national exam.

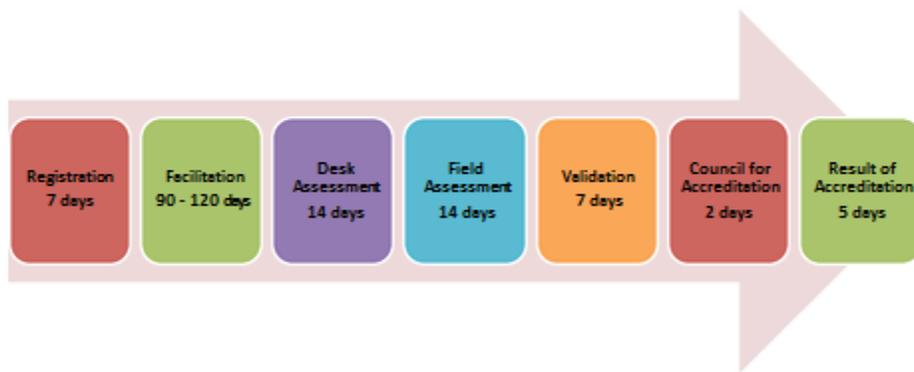
A BEST practice being done by the Ministry of Research, Technology and Higher Education through the Directorate for Quality Assurance is that a Facilitator/Consultant is provided, paid by the government, to help improve quality of education of a school from “poor” or Level C to “good” or Level B or even higher.

Internal quality assurance is the responsibility of the tertiary education institutions and is done through compliance with National Higher Education Standards and annual reporting system.

1.2 Legal Basis

To ensure quality assurance in higher education, the Higher Education Act Number 12 year 2012 has the following provisions- Section 52 paragraph (1) higher education quality assurance is a systemic activity in a planned and sustainable manner; Section 53...quality assurance system includes...a. Internal quality assurance system developed by tertiary education institutions, and b. external quality assurance system through accreditation; and, Section 55 paragraph (5) accreditation of study programs as public accountability shall be conducted by an independent accreditation agency.

IAAHEH BUSINESS PROCESS
(CONSISTS OF 52 STEPS IN 6 – 9 MONTHS)



Source: Indonesian country Report on Medical and Nursing Education System May 11, 2016

Figure 9
IAAHEH Business Process

ACCREDITATION PROCESS BY IAAHEH		
No	Component	Business Process
1.	Business process of accreditation (consists of 52 steps in 6d9 months)	<ol style="list-style-type: none"> 1. Preparation of accreditation by study program with facilitation by facilitator 2. Desk evaluation 3. Field Visit 4. Validation 5. Accreditation decision 6. Complaint resolution 7. Monitoring the study program's compliance toward IAAHEH's recommendation
2.	Request for accreditation	<ol style="list-style-type: none"> 1) Active 2) 1 year before the Study Program's accreditation expired
3.	Number of assessors	2 or 3 persons
4.	Accreditation system	Online system using SIMAk (Sistem Informasi dan Manajemen Akreditasi/ Informational and Management of Accreditation System)
5.	Instruments of Accreditation	Specific instrument of accreditation according to each health dicipline
6.	Council of Accreditation	Consists of 15 persons (1 person from 7 professional organizations, 1 person from 7 associations of institution, and 1 person as the representative from civil society)

Source: Indonesian country Report on Medical and Nursing Education System May 11, 2016

Table 12
Accreditation Process by IAAHEH

2. The Malaysian Model: Mandatory Accreditation through a Central Accrediting Body MQA

The Ministry of Higher Education (MOHE) is the government agency that approves and regulates education programs including the bachelor degree program. However, the diploma program for nursing is under the supervision of the Ministry of Health.

2.1 Quality Assurance of Higher Education

Quality of higher education is assured through the Malaysian Qualification Agency (MQA). The MQA was established by virtue of the Malaysian Qualifications Act of 2007 as the external accrediting body. It is the central body that has the mandate to accredit higher education. Prior to 2007, external accreditation of higher education institutions was done by the National Accreditation Board (LAN in Malay).

The legal basis of MQA is the Malaysian Agency Act 2007 s.35 (1) which states that: *“The Agency shall be responsible for the implementation of the national framework to be known as the “Malaysian Qualifications Framework”, consisting of qualifications, programmes and higher education providers based on a set of criteria and standards including learning outcomes achieved and credits based on students’ academic load.”*

For professional programs, accreditation is done by a Joint Technical Committee composed of respective professional bodies established under various acts of Parliament to regulate the professions through licensing of practitioners and the MQA. The Nursing Board of Malaysia is the body that regulates the nursing profession based on the Nursing Act of 1950. Quality assurance is through compliance with MQF, Code of Practice and Program Standards of the professions.

The functions of the Malaysian Qualifications Agency (MQA) are:

1. To implement the Malaysian Qualifications Framework as a reference point for Malaysian qualifications
2. To develop standards and credit and all other relevant instruments as national references for the conferment of awards with the cooperation of stakeholders
3. To quality assure higher education institutions and programs
4. To accredit courses that fulfill the set criteria and standards
5. To facilitate recognition and articulation of qualifications, and
6. To maintain the Malaysian Qualifications Registry (MQR).

Internal quality of education programs is assured through the approval of the program by the concerned university senate or governing board.

3. The Philippine Model: Voluntary Accreditation

The Philippines has three (3) government agencies regulating education in the country. The Commission on Higher Education (CHED) supervises HEIs in the provision of educational services at the tertiary level, Department of Education (DepEd) supervises basic education and the Technical Education and Skills Development Authority (TESDA) supervises technical and vocational education.

3.1 Quality Assurance through Accreditation

For higher education, initial approval of a new program is granted by the Commission on Higher Education and gives Permit Status to the college/university which allows the HEI to start offering the program. Before the first cohort of students graduate, CHED through the Technical Committee for Nursing Education will do a site visit and document review to determine if the program meets the minimum requirements based on the Policies and Standards (PSG) for the program. If the requirements of the PSG are met, CHED will grant government recognition (Government Recognition status).

For the nursing program, the minimum requirements for the recognition are contained in the Policies and Standards (PSG) for the Bachelor of Science in Nursing issued by CHED, CMO No. 14 s. 2009. Only graduates from university/college with government recognition can sit for the Philippine Nursing Licensure Examination.

Monitoring of nursing programs is done by the Technical Committee for Nursing Education (TCNE). It is composed of the Chair of the Professional Regulatory Board of Nursing (PRC BON) who sits as a permanent member, president of the Association of Deans of Philippine Colleges of Nursing (ADPCN), president of the Philippine Nurses Association (PNA), and 3 nurse academicians from universities whose nursing programs have been recognized as Centers of Excellence (CoE). The Chair of TCNE is appointed by CHED from among the members. Continuing monitoring and evaluation is done jointly by CHED TCNE and PRC BON according to the Philippine Nursing Act of 2002 RA9173.

Internal quality assurance of the program is through a review process done by the university curriculum committee and subsequent approval by the university's academic council which considers the PSG for the program issued by CHED. An institution desiring to offer the bachelor degree program for nursing must secure initial permission from CHED and given Permit Status before it can begin to offer the program.

CHED CMO No. 01 s. 2005 is the legal basis for voluntary external accreditation. In the statement of policy (Article 1 (2)) accreditation is voluntary and non-governmental in nature. There are two (2) independent federation/network of accrediting agencies recognized by CHED. The Federation of Accrediting Agencies of the Philippines (FAAP) accredits private universities and colleges. There are three (3) independent accrediting bodies which are members of FAAP- Philippine Association of Colleges and Universities-Commission on Accreditation (PACUCOA), Philippine Accrediting Association of Schools and Universities (PAASCU), and Association of Christian Schools and Colleges Accrediting Agency Inc. (ACSC-AAI). The National Network of Quality Accrediting Agencies (NNQAA) accredits public universities and colleges. The members of the

network NNQAA are the Accrediting Agency of Chartered Colleges and Universities of the Philippines (AACCCUP) and the Association of Local Colleges and Universities Commission on Accreditation (ALCUCOA). The federation or network for accreditation recognized by CHED are subject to periodic review every five years after recognition or as the need arises.

For the external accreditation of the program, there are four (4) accredited levels with Level IV as the highest. For each level, there are benefits granted by CHED to the education institution which have undertaken voluntary accreditation.

CHED accredits and recognizes programs that implement way above the minimum required for government recognition as Center of Development (CoD) and highest award is as Center of Excellence (CoE). For the Bachelor of Science in Nursing there are six (6) CoE and six (6) Centers of Development (CoD).

CHED has a system of accrediting institutions of higher education (HEI) which is granted to a Philippine private institutions of higher education (PHEIs) which have a consistent commitment to excellent service through quality education, research and extension work (CHED CMO 44 s. 2008). Commitment to excellence of the PHEI is evidenced by the number of programs accredited as CoE or CoD, accreditation status (voluntary) or the attainment of the Institutional Monitoring and Evaluation for Quality Assurance in Higher Education (IQUAME). As of 2015, there are 1,708 private institutions of higher education (PHEIs) in the country which makes the task of supervising these PHEIs formidable. There are two (2) types of institutional accreditation granted to PHEIs- autonomous status and deregulated status. The process for institutional accreditation is voluntary and it is initiated by the institution of higher education itself. Institutional accredited status granted by CHED is valid for three (3) to five (5) years and is renewable provided the PHEI has met all the requirements to qualify for designation as autonomous or deregulated status. As of April 2016 CHED CMO 20 s. 2016, there are 59 PHEIs with autonomous status and sixteen (16) PHEIs with deregulated status. The remaining PHEIs are under the regulated status which is supervised regularly by CHED.

IV. Discussion of Results

Activities to harmonize nursing education among the ten member countries of ASEAN (AMS) are on-going at a varied pace. One clear harmonizing activity already done by the countries is the upgrading of the nursing curriculum to the bachelor degree requirement of the ASEAN Joint Coordinating Committee for Nursing (AJCCN) Mutual Recognition Agreement (MRA). AJCCN has set the entry qualification for professional nursing practice at the bachelor level.

There are varied curricular structure, credit system, methods of teaching and methods of assessing learning outcomes of students. Thus harmonizing these elements of nursing education to facilitate student academic mobility is a big challenge. A mechanism that can be employed by the AMS is to utilize the five (5) core competency domains and the indicators developed by AJCCN. The five core competency domains are:

- 1) Ethics and legal competencies (4 indicators)
- 2) Professional nursing practice (9 indicators)
- 3) Leadership and management competencies (8 indicators)
- 4) Education and research competency (4 indicators)
- 5) Personal, professional quality competency (7 indicators)

The AMS can benchmark its curriculum with the core competency domains and indicators and align the learning outcomes and competencies of their own curriculum with that recommended by AJCCNS to ensure that their nursing graduates will have the necessary competencies to allow for work mobility for cross border employability.

Giving the nursing students opportunity to study and experience professional nursing in other countries will broaden the students perspective and may facilitate work mobility when the student completes the nursing program.

The challenge of crediting courses taken from a university outside that of the student's own country may be addressed by adopting any of the available credit transfer system such as the ASEAN University Network Credit Transfer System (AUN-CTS) which is applicable to the Student Exchange Program among member universities of AUN. University Mobility in Asia and the Pacific (UMAP) Credit Transfer System (UCTS) facilitates student mobility in the Asia Pacific Region by providing a framework for establishing credit transfer arrangements. UMAP Exchange Program allows member HEIs to undertake formal study for a minimum of two weeks and a maximum of two semesters.

UMAP Credit Transfer System defines one (1) UCTS = 38-48 hours of student workload which includes 13-16 hours of academic instruction. The UMAP-CTS adopted in 2012 is part of a "permeable" framework and simple system which has adopted the concept of Asian Academic Credits (AACs) developed under the study of Hotta in 2010.

The Ministry of Research Technology and Higher Education of Indonesia has started using the AUN-CTS for crediting courses taken off-shore by their own students. On the other hand, the Philippine Commission on Higher Education has issued a Memorandum Order to institutions of higher education in the Philippines to use UMAP-CTS when evaluating courses taken by students under the exchange program of UMAP member universities. The experience of these two countries on credit transfer system may be shared with other Southeast Asian countries.

Quality assurance through accreditation is a transparent mechanism that allows members states to be assured that the nursing program of a university/college has met the standards set and its nursing graduates possess the core competencies of a safe and competent professional nurse. Crediting of courses taken outside of the student's home university is facilitated when the accreditor/ evaluator knows the quality of the nursing program.

VI. Conclusions

The Southeast Asian nations particularly the ASEAN member states have activities initiated to harmonize/align nursing education in the region. The countries through the ASEAN Joint Coordinating Committee for Nursing (AJCCN) have agreed that the minimum level for professional nursing practice should be the bachelor degree which is a minimum of four (4) years. All member states have already upgraded their nursing education to bachelor degree while still retaining their diploma program. However, an area that still need to be addressed is the equivalences of course credits given to the professional/major courses in nursing so that substantial equivalence can be assured.

The credit transfer system, as one of the harmonization platforms, is not fully operationalized in the nursing education in the region. While the AUN-CTS and the UMAP-CTS are systems already available for use by the member states when crediting courses taken off shore, most of the member states have no credit transfer system currently being used. With the experience of Indonesia and the Philippines on the use of the AUN-CTS and UMAP-CTS, the ASEAN Secretariat can facilitate the sharing of experiences among the countries so that a policy for Academic Credit Transfer System for the nursing profession to be commonly used in Southeast Asian countries can be decided. SEAMEO RIHED experience with their ASEAN International Mobility for Students (AIMS) can be a model for establishing Credit Transfer System for nursing education to be utilized in the region.

A critical component of credit transfer is assurance of quality of the courses in addition to hours for credit. Thus, quality assurance, which is another platform for harmonization, through program accreditation is crucial to ensure that substantive equivalence is assured. Since several of the member states do not have external accreditation system, there is a need to encourage the concerned countries to establish external accreditation system in their country. There are three models for external accreditation for quality assurance which countries can chose from and select the most fitted to their context. Countries intending to put in place their own external accreditation system may need assistance from SEAMEO for capacity building. The practice of Indonesia where a consultant is assigned to an institution of higher education to help the institution upgrade their program accreditation is a Best Practice that can be shared with the member states.

VII. Recommendations

1. On Harmonization of Nursing Education
 - 1.1. To harmonize the nursing curricula of the different member states, the five core competency domains and the indicators developed by the ASEAN Joint Coordinating Committee for Nursing (AJCCN) be promoted as the common measures or standards when assessing comparability of nursing programs .
2. On Quality Assurance in Nursing Education
 - 2.1. Accreditation of nursing programs needs to be done to ensure quality of the programs. With both internal and external accreditation processes in place, countries are assured that the graduates of these higher education institutions (HEIs) are qualified and are safe practitioners.

2.1.To assist countries in the establishment of their own quality assurance system through external accreditation, either by hiring a consultant to work with the higher education institution for capacity building or through exposure and learning from the experiences of the other countries so that upgrading of the accreditation status is facilitated.

3. On Credit Transfer System

3.1.To facilitate crediting of courses taken off shore, countries may choose to use either the ASEAN University Network (AUN) Credit Transfer System (CTS) or the University Mobility UMAP-CTS. SEAMEO RIHED ASEAN International Mobility for Students (AIMS) Program can also be used by interested countries. SEAMEO RIHED may give assistance to the countries who are interested to adopt a crediting system through capacity building of education officials

4. Other recommendations

4.1. Since curriculum implementation depends largely on the faculty members teaching the professional courses, academic mobility should also include the faculty members teaching nursing courses. Exposing the faculty to other countries education system and culture can be a strategy towards harmonizing nursing education among the member states.

4.2. SEAMEO may consider assisting the Southeast Asian countries that still do not have a nursing council that regulates nursing education and practice; and no existing nursing law that sets the policies on nursing education and the scope of practice to develop their own within the context of their country's health system, health needs and requirements for human resources for health.

References

- Accreditation Service or International Schools Colleges and Universities. (2015). Student Mobility in South East Asia Accelerates due to ASEAN Initiatives. Retrieved in <http://www.asicuk.com/news/student-mobility-south-east-asia-accelerate-due-asean-initiatives/> on April 23, 2016.
- Ahza, AB. Indonesian National Accreditation Agency for Higher Education (BAN-PT) Country Report for The Roundtable meeting of Quality Assurance Agencies of the Organization of Islamic Conference Member Countries. Retrieved in <http://www.mqa.gov.my/.../Country%20Report/Indonesia%20Nation> on April 26, 2016.
- Alice Lee Centre of Nursing Studies. Bachelor of Science (Nursing and Honours). National University of Singapore. Retrieved in http://www.med.nus.edu.sg/nursing/prg_ug_intro.shtml on April 23, 2016.
- AP Rashidah Sa'adatul Bolkih Institute of Health Sciences, Universiti Brunei Darussalam Retrieved in <http://ihs.ubd.edu.bn/custom.php?page=diplomaihs#Nusing> on March 29, 2016
- ASEAN Joint Coordinating Committee for Nursing. AJCCN Achievement 2007-2015, 21st Meeting, Bangkok, Thailand, January 25, 2016
- Asian Development Bank (2013). Progress Report on Tranche Release. Vietnam: Health Human Sector Development Program Second Tranche. Accessed in www.adb.org/sites/default/files/project-document/.../40354-031-prtr.pdf on April 12, 2016.
- Brunei Darrusalam Qualifications Framework (2014). Secretariat of Brunei Darrusalam, National Accreditation Council, Ministry of Education, Brunei Darrusalam.
- Cambodian Council of Nurses website. Retrieved in <https://sites.google.com/site/cambodiancouncil/home> on April 9, 2016.
- Clark N (2014). Higher Education in Vietnam. World Education News and Reviews. Retrieved in <http://wenr.wes.org/2014/05/higher-education-in-vietnam/> on April 12, 2016.
- Commission on Higher Education (CHED) (2005) CMO 01 series 2005. Revised Policies and Guidelines on Voluntary Accreditation in Aid of Quality and Excellence in Higher Education
- Commission on Higher Education (CHED) (2008) CMO 44 series 2008. Policies and Guidelines for the Grant of Autonomous and Deregulated Status to Higher Education Institutions
- Commission on Higher Education (CHED) (2009). CMO 14 series 2009. Policies and Standards for the Bachelor of Science in Nursing.
- Commission on Higher Education (CHED) (2013). CMO 33 series 2013 Policies and Guidelines on University Mobility in Asia and the Pacific (UMAP) Credit Transfer Scheme (UCTS).

Retrieved in www.ched.gov.ph/wp-content/uploads/2013/.../CMO-No.33-s2013.pdf on April 11, 2016.

Commission on Higher Education (CHED) (2014). CMO 11 series 2014. Guidelines for Participation of Selected Higher Education Institution (HEIs) in the ASEAN International Mobility for Students (AIMS) Program

Commission on Higher Education (CHED) (2015). Proposed Policy and Standards on the Internationalization of Philippine Higher Education. Retrieved in www.ched.gov.ph/.../Memorandum-from-the-Chairperson-on-the-Public... On April 11, 2016.

Commission on Higher Education (CHED) (2015). CMO 01 series 2015 Revised Policies and Guidelines on Voluntary Accreditation in Aid of Quality and Excellence in Higher Education

Hanoi Medical College Retrieved in <http://eng.yhn.edu.vn/knowledge-structure-of-training-program/167/1336.html> on April 12, 2016.

Henker R. Prak M. & Koy V. (2015). Development and Implementation of Cornerstone Documents to Support Nursing Practice in Cambodia. Retrieved in [ANA Periodicals OJINTable of Contents Vol 20 2015 No2 May 2015](#) on April 9, 2016.

Hiep Pham (2012). Building Asia's platform for student mobility. University World News. December 2012 Issue No:250 Retrieved in <http://www.universityworldnews.com/article.php?story=20121130003809959> on April 9, 2016.

International Labor Organization (ILO) Tripartite Action for the protection and Promotion of the rights of Migrant Workers & ILO Decent Work Technical Team (2015) Assessment of the readiness of ASEAN member states for implementation of commitment to the free flow of skilled labor within the ASEAN economic community from 2015.

International Islamic University Malaysia. Bachelor of Nursing (Honours). Retrieved in <http://www.iium.edu.my/nursing/programmes-courses/undergraduate-programmes/bachelor-nursing-honours> on April 23, 2016.

International Labour Organization (ILO) (2013) sssessment of the Readiness of Asian Member States for the Implementation of the Commitment to the Free Flow of Skilled Labour within the Asean Economic Community from 2015. ILO Decent Work Technical Team, Bangkok. Retrieved in www.ilo.org/wcmsp5/groups/.../---asia/---ro.../wcms_310231.pdf on March 31, 2016.

Indonesian National Nurses Association. Retrieved in <http://www.inna-ppni.or.id/>

International Labor Organizartion (2014). Assessment of readiness of ASEAN Member States for implementation of the Commitment to the free flow of skilled labour from 2015.within the ASEAN Economic Community.

Jalan Tungku Link, BE1410, Negara Brunei Darussalam Retrieved in <http://ihs.ubd.edu.bn/custom.php?page=diplomaihs#Nusing> on March 29, 2016.

Kyi Shwin (2015). Implementation of ASEAN Qualifications Reference Framework: Myanmar's Readiness. Retrieved in http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-yangon/documents/presentation/wcms_355943.pdf on March 31, 2016.

Ministry of Education Malaysia. Malaysian Education Blueprint 2015-2025 (Higher Education) Malaysian Nurses Association. Retrieved in <http://www.mna.org.my/general/executivecouncil.asp> on April 23, 2016.

Malaysian Qualification Agency (2013). Programme Standards; Medical and Health Sciences. Standard Program: Sains Perubatan Dan Kesihatan.

Malaysian Qualifications Framework. Point of Reference and Joint Understanding of Higher Education Qualifications in Malaysia

Myanmar Nurse and Midwife Council. Retrieved in <http://www.mnmcmyanmar.org/laws/the-law-relating-to-the-nurse-and-midwife-1990/> on April 23, 2016.

Ministry of Health (2014). Myanmar Managing Health Workforce Retrieved in www.moh.gov.mm/.../MANAGING%20HEALTH%20WORK%20FORC.. on March 31, 2016.

Nursing/Midwives Board of Malaysia. Standard Operating Procedures for Approval/ Accreditation of Nursing Programmes. Revised July 2015

Republic Act 9173 Philippine Nursing Act of 2002

SEAMEO RIHED, June 2012. ASEAN International Mobility for Students (AIMS) Programme: Operational Handbook

SEAMEO Vochtech Region Center (2015) Technical and Vocational Training in LAO PDR. Retrieved in http://seatvet.seameo.org/template/docs/TVET_Lao%20PDR_2015.pdf on March 31, 2016.

Singapore Board (2011). Standards for Nursing Education and Standards or Advance Practice Nurse Education. Retrieved in www.healthprofessionals.gov.sg/.../SNB-Nursing%20Edu%20and%20sta on April 23, 2016.

Singapore Nursing board (2015). Guidelines For Curriculum Accreditation/ Re-Accreditation of Pre-registration Nursing Programmes Retrieved in www.healthprofessionals.gov.sg/.../Guidelines/Guidelines%20for%20cur on April 23, 2016.

Singapore Nurses Association Retrieved in <http://www.sna.org.sg/contact-us-2/> on April 23, 2016.

Thailand and Midwifery Nursing Council Accessed in <http://www.tnc.or.th/en/content/content-10186.html> April 12, 2016.

The Law relating to the Nurse and Midwife (The State Law and Order Restoration Council Law No. 19/90) 14th Waning Day of Thadinkyut, 1352 M.E. (17th October, 1990) Retrieved in Myanmar Nurse and Midwife Council available in <http://www.mnmcmyanmar.org/laws/the-law-relating-to-the-nurse-and-midwife-1990/> on April 23, 2016.

The Statutes of the Republic of Singapore Nurses and Midwives Act. (2012). Retrieved in statutes.agc.gov.sg/aol/search/display/view.w3p?page=0;query on April 23, 2016.

The University of Nursing, Yangon. Retrieved in <http://www.uonygn.gov.mm/> on March 31, 2016.

UCSI University. Bachelor of Nursing Honours. Retrieved in <http://www.ucsiuniversity.edu.my/about/the-university/listing.aspx> on April 23, 2016.

Universiti Brunei Darrusalam (2005). Brunei Darrusalam Education System, Academic Year 2014-2015. Retrieved in <http://www.international.ac.uk/media/4314/brunei%20darussalam%20-%20education%20system.pdf> on March 29, 2016.

University of Medicine and Pharmacy Ho Chi Minh City Vietnam. Retrieved in <http://moodle.yds.edu.vn/yds2/?Content=thongtinDV&idTin=14124&menu=448> April 12, 2016.

Vietnam Quality Assurance Systems and Development (2014) Retrieved in www.austrade.gov.au/.../Vietnam%20Quality%20Assurance%20System... On April 12, 2016.

Western Pacific Region Nursing and Midwifery Databank (2013) Retrieved in www.wpro.who.int/hrh/about/nursing_midwifery/db_viet_nam_2013.pdf on April 9, 2016.

World Health Organization (2013). Transforming and Scaling up Health Professional Education and Training. Policy Brief on Accreditation of Institutions for Health Professional Education. Retrieved in whoeducationguidelines.org/.../whoeduguidelines_PolicyBrief_Accreditation . April 23, 2016.

World Health Organization Regional Office of South-East Asia (2010) Quality Assurance and Accreditation of Nursing and Midwifery Educational Institutions.